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Change in the USDA Forest Service: Are We Heading in the Right Direction?

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Chapter 1

INTRODUCTION

More than 1,800 USDA Forest Service employees were surveyed to obtain views about the Agency's mission and programs directly from the people most involved and most responsible for implementing them. This survey was conducted by the University of Michigan's School of Natural Resources and Environment. Much of the motivation for this study comes from our interest in understanding how the Agency is responding to rapidly changing social, economic, and political demands. Change in the Forest Service has recently been the subject of much discussion and debate in professional and academic circles. Thus, we were interested in finding out whether employees believe that the Agency is headed in the right direction to deal with important contemporary issues. We also wanted to obtain employees' views about the extent of changes happening in the Agency and the need for further change. We were especially interested in employee recommendations about what the Forest Service needs to do to enhance its programs and improve its position.

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Background

Several observers (see, for example, Kennedy 1988, and Tipple and Wellman 1991) have noted the changing social and political environment in which the Forest Service has found itself since the environmental movement began gathering momentum in the 1960's and 1970's. During these 2 decades, public concern about the environment resulted in the passage of significant new laws that have had important impacts on how the Agency manages the National Forests. These laws—such as the Wilderness Act of 1964, the National Environmental Policy Act (NEPA) of 1969, the Endangered Species Act of 1973, and the National Forest Management Act (NFMA) of 1976,—have broadened and complicated the tasks of the Forest Service (Tipple and Wellman 1991). They have also increased public involvement in and scrutiny of Agency activities and decisions. The new mandates and unprecedented public scrutiny are pressuring the Forest Service to place greater emphasis on non-commodity resources and values such as recreation, fish and wildlife, and water, and less emphasis on commodity values such as timber. Frequent use of the courts by environmentalists and increasing Congressional oversight have further increased scrutiny of and pressure on the Agency.

In addition to external pressures for change, observers have argued that internal pressures for change have been building as a result of the increasing professional and demographic diversity in the Agency since the 1970's and 1980's (Kennedy 1988, McCarthy *et al.* 1991, Brown and Harris 1993). Kennedy (1988), for example, has argued that interdisciplinary teams required by NEPA in assessing the environmental consequences of major Forest Service decisions have resulted in the Agency's employment of a greater

variety of professionals such as wildlife biologists, recreation planners, and economists. These non-traditional (i.e., non-forestry trained) professionals bring with them new perspectives that eventually influence the thinking of their more traditionally trained Forest Service colleagues. Affirmative action and the increasing number of women being hired and promoted into line positions may also be potential sources for increased diversity of ideas in the Agency (Brown and Harris 1993).

Several recent surveys have attempted to measure change in the Forest Service by assessing the extent of value and attitude changes exhibited by Agency personnel. These include Kennedy *et al.*'s 1989-1990 study (Kennedy *et al.* 1992), Brown and Harris's 1990 survey (Brown and Harris 1992a,b; 1993), and Sabatier *et al.*'s 1989 study (McCarthy *et al.* 1991). All these researchers have inferred change in employee values by comparing responses to items in their questionnaires to those of earlier studies, most notably Twight and Lyden's 1981 survey of District Rangers (Twight and Lyden 1988, 1989). Some of the replicated items included Twight and Lyden's questions to assess employee views on a series of policy issues and alternatives contained in the 1980 Strategic Plan, e.g., indicating how much they favor "increased production of wood from National Forest System lands" and "use of herbicides on brush in National Forest management." Other replicated items asked employees how much they agreed or disagreed with contrasting values such as "emphasizing environmental protection versus emphasizing economic growth" and "emphasizing preserving nature versus emphasizing using nature to produce goods." All the authors of these studies have argued that Forest Service employees are less commodity oriented and more non-commodity oriented than previously, based on comparisons with Twight and Lyden's results and others.

Opinions about the extent of changes in the Forest Service are by no means unanimous, however. Twight and Lyden (1988, 1989) have argued that any apparent changes are relatively insignificant because the Agency retains many of the identity building and socialization processes that Herbert Kaufman described in his 1960 work, *The Forest Ranger* (see also Twight 1983, for a discussion of these processes). These processes, they argue, result in a relatively closed organization that is unresponsive to external influences and is resistant to innovation and change. Twight and Lyden argue that few changes have occurred in these processes since the time of Kaufman's writing. The Forest Service adheres tightly to a traditional value orientation that stresses commodity development, and it is likely to continue to do so given its present promotion and reward system.

Twight and Lyden's study demonstrated a high degree of uniformity among Forest Service District Rangers. They also showed that District Rangers' responses to value items were more similar to those of commodity users of the National Forests than to those of environmentalists. Although their survey took place in 1981, when change may have only just been beginning, Twight and Lyden have argued that the Agency's promotion and reward system and traditional socialization mechanisms make it unlikely to shift to a more non-commodity focus any time soon.

Kennedy *et al.* found that "loyalty" is perceived by employees to be the most rewarded value in the Forest Service, thus appearing to support Twight and Lyden's contention. Furthermore, even though Kennedy *et al.* and Brown and Harris found employees to **individually** place a greater emphasis on non-commodity uses of the National Forests than revealed by Twight and Lyden's earlier study, they nevertheless found employees to rank **the Agency's** priorities as persistently high on commodity values. This suggests that regardless of employees' personal feelings, institutionally the Agency may have changed little from the time of Twight and Lyden's study.

Objectives

In light of the rapidly changing social and political demands on the Forest Service and current discussions of change and need for change in the Agency, we attempted to assess how the Agency is responding to the pressures. As indicated above, studies of the Forest Service to date have inferred change by comparing values and attitudes of Forest Service employees with those of earlier studies. However, no prior study queried employees directly about their perceptions of changes going on in the Agency. This study did so.

Perhaps more important than assessing employee perceptions of change was our attempt to find out whether employees believe that change in the Agency and its policies are in the right direction. If so, has the Agency gone far enough? Is it where it should be? Does it have further to go? If the Agency is not headed in the right direction, in what direction should it be headed? And what specific recommendations do Forest Service employees have for getting there?

To find the answers to these questions, we focused on the issue responses and role statements of the 1990, rather than 1980, Resource Planning Act (RPA) Strategic Plan (USDA Forest Service 1990). The 1990 Plan defines the Forest Service's mission, roles, and program direction for a 5-year period, and addresses the most salient issues facing the Agency today, such as the below-cost timber sale issue, the old-growth controversy, biodiversity, and global climate change. We believe that it is not possible to assess change in the Agency without considering the reality of change in the issues confronting it. Using the statements contained in the 1990 RPA, we designed a series of questions to determine employee perceptions of Forest Service programs and activities. In addition, we asked background questions to obtain information useful in stratifying the respondents. This information was used to assess the extent of diversification in the Agency and its possible effect on employees' views.

In the following chapters, we present results of the survey. Chapter 2 describes our survey methodology and sampling design, and it gives a brief demographic profile of Forest Service employees. Chapter 3 provides information about employees' views on the issues facing the Forest Service in the 1990's and their views on the Agency's policy directions to deal with these issues. Do employees believe present policies represent changes in policy over the past 10 years? Do they think these changes are for the better or worse? Has the Agency gone far enough to address these issues? Chapter 4 reports what further actions employees recommend, both on specific policies and on changes needed in the Agency generally. Chapter 5 describes employee views on some specific issues such as the Forest Service's multiple use mission, public involvement, and Agency leadership. Chapter 6 assesses the environmental attitudes of Forest Service employees. Chapter 7 reports on the extent of workforce diversification in the Agency and the effect of diversification on Agency attitudes and perceptions. The Appendix contains a copy of the survey questionnaire.

Chapter 2

STUDY DESIGN AND SAMPLE

We designed the sample to provide a statistically valid portrayal of views across various strata of the Forest Service. The strata we were interested in included functional position (line officer, professional staff, support staff, etc.) and discipline (range conservationists, wildlife managers, foresters, etc.). Information was also collected on background variables such as age, race, gender, educational level, and years of experience. Groups were compared on the basis of these variables.

To produce statistically reliable results, we interviewed 1,809 Forest Service employees. We used probability sampling techniques to select individuals. The sample drawn was roughly half line officers (n=865) and half staff employees (n=944). Because we wanted to obtain reliable information about various subgroups of employees, these subgroups were oversampled in the study. Subgroups falling into this category included upper line employees, upper staff employees, minorities, and women.

The breakdown of our sample by functional position is shown in table 1. A comparable breakdown of the entire Forest Service population of 34,830 employees is also provided. The category "upper line" includes the Chief, Associate Chief, and Deputy Chiefs. At the research stations, upper line includes Station Directors, Deputy Station Directors, and Assistant Station Directors. We included Regional Foresters, Deputy Regional Foresters, and Forest Supervisors in the upper line category, as well as the Area Director and Deputy Director for Northeastern Area State and Private Forestry. We attempted to interview all these employees (i.e., with a 100 percent probability of selection). We defined the "lower line" category to include Deputy Forest Supervisors, District Rangers, and Project Leaders. We attempted to interview all women and all minority employees in the lower line category (100 percent probability of selection). White males in the lower line position also had a very high chance of being selected (92.2 percent).

Staff employees had a lower chance of being selected for an interview than line employees did. Upper staff (staff employees with General Schedule (GS) ratings of 12 and above) had a 4.8 percent probability of being selected for an interview. Middle staff (staff employees with GS ratings between 7 and 11) had a 3.0 percent probability of being selected. Lower staff (staff employees with GS ratings of 6 and below) had a 2.0 percent probability of being selected. Because our sample was stratified, employee responses were appropriately weighted in all the subsequent analyses.

We subcontracted with the Sampling Section of the Survey Research Center of the Institute for Social Research at the University of Michigan to draw the sample. The sample was drawn using information contained in the Forest Service Workforce Data Base provided by the Office of Personnel Management. Telephone interviewing and data coding and entry were performed by Information Transfer Systems of Ann Arbor, Michigan. These two survey organizations were selected not only to provide their expertise, but also to help ensure confidentiality. We used telephone interviews because of the advantages they provide, including opportunities for clarifying questions and prompting respondents for answers. Telephone interviews also provide a more controlled setting for conducting the survey as compared to mail surveys, thus reducing error. Response rates are also typically much higher, reducing potential bias. The response rate for this survey was an unprecedented 94.5 percent. Interviews took place between January and May 1992. Employees spent an average of 45 minutes completing the interview.

Table 2 provides some background information about line and staff employees in the Forest Service, including educational attainment, average years of service, age, and other demographic variables. It also gives some information, based on self-reports, about how familiar line and staff are with the 1990 RPA Strategic Plan as well as how much input employees have in forest planning. On average, line officers have been employed by the Agency 5 years longer than staff employees and are somewhat older. The educational attainment of both line and staff is quite

high with the majority holding bachelor's degrees. Many line and staff employees also hold advanced degrees. As might be expected, a much larger proportion of line officers than staff employees indicate they are at least "somewhat" or "very" familiar with the RPA Strategic Plan. Likewise, a much greater proportion of line officers than staff indicate they have either "some" or "a great deal" of input in forest planning.

Despite recent gains made by women and minorities in the Forest Service, table 2 shows that women and minorities are still significantly underrepresented in the Agency, especially in the line category.

Chapter 3

EMPLOYEE VIEWS ABOUT FOREST SERVICE POLICY DIRECTIONS AND THE NEED FOR CHANGE

In this chapter, we provide information obtained from Forest Service employees about their views of important issues facing the Agency and the policies addressing those issues. Do employees believe current policies differ from past policies and are the changes in the right direction? Moreover, do employees feel that the Agency has further to go to get to where it should be?

We examined not only employee views about change in Forest Service policies and the desirability of future change, but also their views on the Agency's multiple use mission and the need for change in direction there. We also asked employees about change in the Forest Service in general.

In all the following, results for line and staff employees have been presented separately and compared.

Employee Views of RPA Issues

We reviewed the 1990 RPA Program and identified 11 issues that we believe represent the Forest Service's present and future challenges:

1. Loss of biological diversity
2. Impacts on riparian areas
3. Maintenance of water quality
4. Global climate change
5. Threats to wilderness areas
6. Meeting of recreational needs
7. Loss of threatened, endangered, and sensitive species
8. Condition of National Forest rangelands
9. Loss of old-growth forests
10. Below-cost timber sales
11. Clearcutting

Interviewers asked a series of questions about each issue to obtain employees' perceptions of (1) the seriousness of the issue, (2) the commitment of the Forest Service to addressing the issue, and (3) change in the policy over the past 10 years. For some issues we also asked employees if the Agency should take further action on the issue, and if so, what that action should be.

Seriousness of issue

During this part of the interview, employees were asked questions worded as follows, using threatened, endangered, and sensitive species as an example (however, exact wording for all questions asked can be found in the Appendix):

> The Forest Service has indicated a commitment to recovering and protecting threatened, endangered, and sensitive species. In general, how serious a problem do you personally think the loss of threatened, endangered, and sensitive species is? Is it a very serious problem, somewhat serious, only a little serious, or not a problem at all?[1]

The vast majority of both line and staff employees rated all 11 issues as "very serious" or "somewhat serious" (fig. 1). However, employees perceive the condition of National Forest rangelands, clearcutting, threats to wilderness areas, and below-cost timber sales as less serious than other issues. Although the responses were similar for all employees, staff were more likely than line to rate an issue as "very serious." For 7 of the 11 issues, the differences between line and staff were statistically significant (alpha=0.01 or better).

Commitment to addressing an issue

Next, employees were asked about the Forest Service's commitment to the policy outlined in the 1990 RPA. Questions were worded as follows:

> How committed do you think the Forest Service is to recovering and protecting threatened, endangered, and sensitive species? Would you say very committed, somewhat committed, only a little committed, or not at all committed?

[1] *In the case of recreation, we asked respondents to indicate how much emphasis should be placed on meeting the recreational needs of the public: much more than now, somewhat more than now, somewhat less than now, or much less than now. See Appendix for exact wording.*

Employees see the Forest Service as most committed to protecting wilderness areas; recovering and protecting threatened, endangered, and sensitive species; and managing riparian areas better (fig. 2). In general, a respondent who indicated that a problem is "very serious" was less likely than others to indicate the Agency is "very committed" to addressing it. Line officers were more likely than staff to indicate that the Forest Service is very committed to addressing an issue. Differences were statistically significant for 8 of the 11 issues.

Changes in policy

To find out if employees perceive an evolution or change in Forest Service policy in recent years, we asked them, for each issue, a question worded as follows:

> Is the stated Forest Service policy on threatened, endangered, and sensitive species different from the policies over the past 10 years?

The vast majority of both line and staff felt that current policies to address these issues differ from the policies of the past 10 years. For seven of the issues, more than 60 percent of both line and staff felt that current policies are better (figs. 3 and 4). Very few employees indicated that the policies did not change over the past 10 years.

Need for further action

Although the above results indicate that employees believe the Forest Service is headed in the right direction on policies to address important issues, we also wanted to determine whether employees think that the Agency has gone far enough. For 5 of the Forest Service's most critical issues (threatened and endangered species, old-growth, National Forest rangelands, clearcutting, and below-cost timber sales), we asked employees whether they felt that further actions should be taken, and if so, what those actions should be. Questions were worded as follows (again with the example issue of threatened and endangered species):

> Do you think there are any further actions the Forest Service should be taking regarding threatened and endangered species?

If employees answered "yes," they were also asked:

> What further actions should the Forest Service be taking regarding threatened and endangered species?

We asked about only 5 of the 11 issues here to limit the time required for the interview.

More than half of all employees (about 50 percent of the staff and 60 percent of the line) felt that further actions are needed on these issues (fig. 5). So, although we saw earlier that the vast majority of employees feel that the Forest Service is headed in the right direction in addressing these issues, employees nevertheless feel that the Agency is not yet where it should be. Respondents' specific recommendations about further actions the Forest Service should take on these issues are given in the next chapter.

Employee Views of the Agency's Multiple Use Objectives

Changes in emphasis

To get another view of changes occurring within the Forest Service, we asked employees to consider the Agency's multiple use objectives, and the extent of change over the past 10 years in the Agency's emphasis on a particular use. For this part of the survey, we identified seven multiple use objectives: timber, grazing, recreation, wildlife and fish, water, minerals, and wilderness. Questions were worded as follows (using wildlife and fish as the example):

> Over the past 10 years, has emphasis on wildlife and fish increased a great deal, increased somewhat, stayed about the same, decreased somewhat, or decreased a great deal?

In general, employees believe that the Agency's emphasis on non-commodity uses of the National Forests has increased in recent years, while emphasis on commodity uses has decreased or stayed about the same (figs. 6 and 7). Almost all line officers and close to 90 percent of all staff employees felt that the Forest Service has increased emphasis on wildlife and fish. Similarly,

more than 90 percent of the line and 80 percent of the staff felt the Agency has increased emphasis on recreation. A large majority of employees also indicated that emphasis on wilderness and water has increased. At the same time, a majority of all employees said that emphasis on commodity uses (timber, grazing, and minerals) has decreased or stayed about the same.

Importance of multiple use objectives

Do employees feel that these changes in emphasis mean that the Forest Service is headed in the right direction? We followed the emphasis questions by asking employees to rank, in order of importance, five traditional multiple uses of the National Forests (timber, grazing, recreation, wildlife and fish, and water). First, we asked employees to focus on what they as individuals feel should be the most important uses of the National Forests, then how important they feel the uses are to the Agency. The list of multiple use objectives was shortened because of the difficulty in ranking more than five items over the telephone. We first asked employees the following:

> I will ask you some questions to help you rank these 5 uses according to how important you as an individual think each of these uses of the National Forests should be. Of timber, grazing, recreation, wildlife and fish, and water, which of these 5 uses is the most important to you personally?

We next asked employees to choose the least important of the remaining four uses; then the most important of the remaining three uses; and finally the least important of the remaining two uses. Using this approach allowed us to produce an employee ranking of the five multiple uses from most important to least important.

We then followed the same process, asking employees to rank the five traditional multiple uses in order of importance to the Forest Service. Specifically, we asked:

> Now please think of these objectives again, including: timber, grazing, recreation, wildlife and fish, and water. This time I will ask about how important you think each use is to the Forest Service. First, which of timber, grazing, recreation, wildlife and fish, and water is the most important to the Forest Service?

During the survey, some employees made the point that the Agency's multiple use philosophy means that all uses are important and that it would therefore be impossible for them to pick one use as the "most important." We did not explicitly offer employees the option of answering "all are most important" or "all are equally important," but we did record if employees volunteered this as a response. A future study might explicitly include such an option and determine if a different pattern of responses is yielded. Nevertheless, by comparing employees' perceptions of what should be most important with their perceptions of what is most important to the Agency, we can make statements about the need for further change.

More than 70 percent of all employees felt that a non-commodity use (wildlife and fish, recreation, and water) should be the most important use of the National Forests (figs. 8 and 9). In contrast, only 14 percent of the line and 22 percent of the staff thought timber should be the most important use, and far fewer yet chose grazing. The remaining 10 percent of line employees and 4 percent of staff employees volunteered either "all are most important" or a "don't know."

Contrasting sharply with employees' views of what **should** be the most important uses are their views of what **are** the most important uses to the Forest Service. The vast majority of all employees (more than 60 percent of line and more than 70 percent of staff) felt that timber is the most important use to the Agency. So, although the vast majority of employees feel that the Forest Service has increased its emphasis on

the non-commodity uses of the National Forests over the past 10 years, they personally feel that non-commodity uses should be even more important to the Agency. This would suggest that the Forest Service has further to go in achieving what Agency employees consider an ideal balance in emphasis.

Employee Views of Below-Cost Timber Sales and Clearcutting

Two management practices have received a great deal of attention within the Agency and in the public arena—below-cost timber sales and clearcutting. Although the Forest Service has modified policies and accounting practices to address both issues, employees feel that the Agency has further to go. We should note that this survey was conducted before former Forest Service Chief Dale Robertson issued a directive in June 1992 about clearcutting on the National Forests. This timing provides an opportunity to use these findings as a baseline, against which changes in response to the Chief's directions can be measured.

The vast majority of employees indicated that below-cost timber sales are justified in some cases (fig. 10). However, more than half felt that there are too many below-cost timber sales on the National Forests. Likewise, the vast majority of employees felt that clearcutting is an acceptable management practice (fig. 11), but the vast majority also felt that there is too much clearcutting on the National Forests.

Identifying Changes Within the Agency in General

Their responses to two open-ended questions further demonstrate that employees feel the Agency is headed in the right direction, but has further to go to get where it should be. First, we asked employees:

> Briefly, what do you think have been the most important positive changes in the Forest Service over the past 10 years?

We followed this question by asking:

> Briefly, what do you think have been the most important negative changes in the Forest Service over the past 10 years?

In our analysis, we coded up to five responses per question, although most employees volunteered only one or two.

As can be seen in table 3, the most frequently mentioned positive changes were increased responsiveness to the public (40 percent of line and 29 percent of staff) and increased emphasis on non-commodity uses of the National Forests (30 percent of line and 31 percent of staff). These responses indicate that, in these areas, a significant proportion of employees feel that the Agency is headed in the right direction. Obviously, these responses do not tell us whether employees feel that the Agency has gone far enough. However, we did ask employees, "What do you think is the single most important change that still needs to be made?" Responses to this question are given in the next chapter.

The most frequently mentioned negative change was the increasing political pressure on the Agency (offered by 24 percent of the line and 15 percent of the staff) (table 4). Changes related to the loss of direction/mission, poor leadership, and the Agency's over responsiveness to political pressure were also mentioned by a significant percentage of employees. Many of the negative changes mentioned affect employees in day-to-day operations—affirmative action; poor work conditions, low morale, and stress; and insufficient funding. However, some of the important negative changes listed in table 4 may be beyond the Agency's control.

Summary

To summarize, we found that the vast majority of Forest Service employees, both line and staff, feel that the Agency's policies have changed over the past 10 years. The vast majority see the Agency headed in the right direction. However, they also feel that the Forest Service still has further to go. In the next chapter, we examine employee recommendations for what the Forest Service needs to do to get where it should be.

Chapter 4

EMPLOYEE RECOMMENDATIONS FOR FURTHER ACTIONS AND NEEDED CHANGE

In the previous chapter, we reported that the vast majority of both line and staff employees feel that, despite positive changes in the past 10 years, the Forest Service has further to go. In this chapter, we examine employees' specific recommendations for what they believe the Agency should do to get where it should be.

First, we look at their recommendations for further actions on some specific RPA policy issues. We next look at general changes employees believe that the Forest Service needs to make. Finally, we report what employees see as important challenges facing the Agency today. Our belief is that employees' views of these challenges provide useful insights about future directions the Agency might take.

In all the following, information was obtained from open-ended questions to allow employees maximum freedom in expressing their views. We recorded all responses verbatim and then coded up to five distinct comments, opinions, or ideas for analysis.

Recommendations for Further Actions on Specific Issues

As indicated in the previous chapter, for 5 of 11 issues we asked respondents not only whether 1990 RPA policies represent changes in policies of the past and whether the changes have been for the better, but also whether respondents think further actions are needed. We found that more than half of Forest Service employees believe further actions are needed on all five issues. And of those who indicated "yes," we asked about specific further actions. The five issues for which we asked this question include (1) threatened and endangered species, (2) the condition of National Forest rangelands, (3) old-growth forests, (4) below-cost timber sales, and (5) clearcutting.

Threatened and endangered species

Table 5 lists the most frequently mentioned further actions employees believe the Forest Service should take about threatened and endangered species. As before, we coded up to five recommendations, although most respondents gave fewer.

As can be seen in table 5, many of the proposals involved calls for greater effort at information gathering and research pertaining to threatened and endangered species. Many employees also feel that the Forest Service should take a more holistic/ecosystem approach in protecting threatened and endangered species, rather than focus on single species management. Many also feel that the Agency needs to increase its commitment and become more aggressive in protecting threatened and endangered species.

Condition of National Forest rangelands

The most frequently mentioned proposal by both line and staff about this issue was to reduce or to eliminate entirely grazing in the National Forests (table 6). Also, many employees recommended that grazing policies be implemented faster, stronger guidelines be provided, and enforcement strengthened. Many also believe that funding for improving rangeland conditions should be increased, riparian areas should be better protected, and grazing fees should be increased.

Old-growth forests

As with the issue of threatened and endangered species, the most frequently mentioned proposals call for greater efforts to collect information and conduct more research (table 7). A significant number of employees, particularly line, indicated that old growth needs to be better defined. Aside from these calls for better information and more research, a significant number of employees also feel that the Forest Service needs to increase its commitment to protecting old-growth forests, including developing an overall management plan for old growth and identifying and setting aside areas for protection.

mentioned proposals by line were to educate the public and Congress on the benefits of and need for below-cost timber sales, and to better document benefits (table 8). Developing a better accounting system of costs and apportioning costs better among various multiple use programs were also frequently mentioned by line. Staff, on the other hand, were far less likely to propose these actions. Instead they are significantly more likely than line to propose reducing or eliminating below-cost sales, although we found a significant number of line officers proposing this as well.

Clearcutting

On this issue employees appear to be equally divided on proposals that support or reject clearcutting. The most frequently mentioned proposals by both line and staff were to educate the public and Congress on the benefits of and need for clearcutting, on the one hand, and to reduce or ban clearcutting on the other (table 9). Also, although a significant number of employees proposed conducting more research on and adopting the use of alternative methods, almost equal numbers of employees proposed conducting more research on the acceptability of and retaining the use of clearcutting. However, as with the below-cost timber sale issue, some disagreements between line and staff exist. Although educating the public and Congress on the benefits of clearcutting was the most frequently mentioned proposal by line (32 percent of the line who indicated further actions are needed), reducing or banning clearcutting was the most frequently mentioned proposal by staff (29 percent).

Recommendations for Needed Changes in the Agency

As we discussed in the previous chapter, Forest Service employees identified several important positive and negative changes in the Agency over the past 10 years. Clearly, the positive changes identified indicate the course the Agency should maintain in the future, while the negative changes identified indicate problem areas for the Agency to work on. Nevertheless, we wanted to find out more directly from employees about important changes that still need to be made. Thus, we followed the questions pertaining to positive and negative changes in the past 10 years with the question "What do you think is the single most important change that still needs to be made?" Table 10 provides the results.

The two most frequent responses to this question are similar to the two most frequently mentioned positive changes in the past 10 years: (1) shifting emphasis from commodity to non-commodity uses of the National Forests and (2) increasing public involvement efforts and increasing the Agency's responsiveness to public needs. These results verify that many line and staff employees believe that these are important directions for the Agency to be headed, and that despite the gains of the last 10 years, the Agency has further to go. The particularly large percentage of line and staff employees who feel that increasing emphasis on non-commodity uses of the National Forests is important also verifies our findings that although the vast majority of employees believe the Agency has increased emphasis on non-commodity uses in the past 10 years, its priorities on such uses are still not in line with what employees believe they should be. Also, noteworthy in table 10 is the large number of line and staff who indicated that the Agency should continue to increase emphasis on environmental concerns and ecological balance.

Increasing political pressure on the Forest Service and the Agency becoming overly responsive to political pressure were seen by many employees as among some of the most important negative changes to occur in the last 10 years (see table 4). Perhaps not surprisingly, standing up to political pressure and managing for the best needs of the forest despite politics were also among the most frequently mentioned actions employees propose the Agency take. Altogether, table 10 contains a rather diverse array of proposals from line and staff employees about other important changes that need to be made.

Challenges Facing the Forest Service

We asked employees "What do you think is the single greatest challenge facing the Forest Service today?" In many respects this question is a variation of the question about important changes the Agency needs to make. However, it was intended to focus on employees' views of the circumstances within which the Forest Service finds itself today, rather than on their views of what the Agency should do about those circumstances. Nevertheless, in analyzing the responses, we found many similar ideas and themes repeated.

As can be seen in table 11, responding to public wants was the most frequently mentioned challenge and is very much in line with employee views that the Forest Service should continue to increase its public involvement efforts and its responsiveness to the public. Also familiar are employees' mentions of increasing ecological and environmental sensitivity and balancing commodity and non-commodity uses of the National Forests. However, this time employees also mentioned regaining public trust and dealing with conflicting demands from various groups, including interest groups, Congress, and the general public as among the greatest challenges facing the Agency. Table 11 provides a rather extensive and diverse list of challenges Forest Service employees identify as facing the Agency today.

Chapter 5

EMPLOYEE VIEWS ABOUT OTHER IMPORTANT ISSUES

In the previous chapters, we examined employee views about a number of important RPA issues and about the Forest Service's policy on those issues. In this chapter, we examine employee views about some other important matters, including the Agency's multiple use and other missions; public involvement, interest groups, and other external pressures facing the Forest Service; the use of face-to-face negotiations in making planning decisions; and the amount of direction employees receive from Agency management.

The Forest Service's Multiple Use Mission

Earlier we saw that although the vast majority of employees believe that the Agency has shifted its emphasis from commodity to non-commodity uses of the National Forests in the last 10 years, they also feel that the Agency's emphasis on timber and other commodity uses is still greater than they think it should be. In this section, we provide further information about employee views of the Forest Service's multiple use mission.

As with the 11 RPA issues examined in Chapter 3, we asked employees whether the Agency's stated multiple use policy represents change in policies over the past 10 years, and, if so, whether it is for the better or worse. Specifically, we asked:

> The Forest Service has indicated that its multiple use policy for the future will be to enhance recreation, wildlife, fisheries, soil, and water resource programs. Timber harvesting and livestock grazing will be maintained at their current levels, while access for minerals development will be increased where that can be accomplished in an environmentally acceptable manner.
>
> Is the proposed policy on multiple use different from the policies over the past 10 years?

Of those who said "yes," we further asked:

> On the whole, how does the proposed policy compare to the policies over the past 10 years? Is it much better, somewhat better, somewhat worse, or much worse?

We found that the vast majority of employees believe that the stated multiple use policy represents change and that this change has been for the better (69 percent of the line and 66 percent of the staff; see Appendix for more details on how employees responded). We also found that the vast majority believe the Forest Service is likely to follow through on this policy.

When we asked employees how committed they believe the Agency is to protecting the environment as it carries out its multiple use objectives, we found virtually all feel the Forest Service is either very committed or somewhat committed. Striking percentages of line employees (more than 60 percent) and staff employees (more than 50 percent) believe that the Agency is **very** committed.

Table 12 provides additional views of the Forest Service's multiple use mission. Several of these deal with tradeoffs between economic and environmental concerns as the Agency pursues its multiple use objectives. As can be seen, a significant proportion of line and staff believe that local economic concerns play too large a role in multiple use management decisions. Furthermore, the vast majority disagree that managing National Forest lands for local employment is more important than managing for environmental quality. Nevertheless, the vast majority also disagree that preservation should be favored over multiple use development.

When asked whether the Forest Service will be able to achieve its future multiple use objectives without harming the environment, a majority indicated that they believed it could. However, many also said that to reduce multiple use conflicts, the Agency should consider shifting to single or dual uses in some areas. We also found that most line and staff disagree that timber harvesting is usually the best way to enhance other multiple uses.

Other RPA Role Statements

We asked Forest Service employees how they view other Forest Service role statements contained in the 1990 RPA Plan, although the number and range of questions we asked were not as extensive as for the multiple use mission. Table 13 includes three proposals and opinions related to these role statements. We wanted to know whether employees agree with the direction that the proposals suggest and whether they believe resource capabilities of the National Forests can be maintained in the future.

As can be seen, the vast majority of employees feel that the Agency should increase emphasis on International Forestry programs. There is a considerable amount of agreement between line and staff here. Although the majority of employees also agree that the Forest Service should place greater emphasis on modifying the management of National Forest areas to complement management activities on adjacent lands, line employees were somewhat less likely than staff to "strongly" agree. A significant proportion of line and staff disagree with this proposal. Finally, sustaining the future resource capabilities of the National Forests is also one of the Forest Service roles stated in the 1990 RPA Plan. We asked employees whether they thought it would be difficult to sustain resource capabilities for future generations under current levels of use. Line employees were fairly evenly split in their opinion, but a slight majority expressed the view that it would indeed be difficult. In contrast, nearly two-thirds of the staff thought so.

Public Involvement, Interest Groups, External Pressures

As we saw earlier, many employees expressed favorable views about public involvement. A significant number feel an increase in the use of public involvement has been one of the most important positive changes to occur in the Agency in the past 10 years and that this effort should continue in the future.

Table 14 provides additional information about employees' views on public involvement. As can be seen, the vast majority believe that the Agency is responsive to public needs in determining multiple use objectives and priorities. However, line employees were split in their opinion about whether public preferences should prevail when they conflict with the judgment of resource professionals. A clear majority of the staff disagreed that the public's preferences should prevail. Furthermore, when parts of the public were identified as "interest groups," the majority of both line and staff felt the demands of such groups are usually not consistent with sound resource management. A majority of line and staff also feel that forest plan objectives are more important than Congressional intent for targets.

When employees were asked how much influence they think the public and various external groups have on Forest Service policy, we found a similar split in views about the role of the public, in general, versus the role of specific groups. As can be seen in table 15, the vast majority of employees feel that the public has too little influence on Forest Service policy. However, when specific external groups were identified, most line and staff felt they have too much influence. For example, the vast majority of line and staff feel that environmental groups have too much influence. The vast majority of line and staff feel that commodity groups, such as timber, grazing, and mining, also have too much influence, and the proportion of line employees who feel this way is especially large. Line employees were equally divided about whether the President and top level Administration officials have too much influence on Forest Service policy or just about the right amount. A little more than half of staff employees believe the President and top officials have too much influence. However, a sizable majority of both line and staff feel that key members of Congress have too much influence. In comparison, the majority of employees, both line and staff, feel that line officers have about the right amount of influence on Forest Service policy. Although the margins are slightly smaller, most employees think that staff have about the right amount of influence as well.

In summation, results for these questions indicate that line and staff support giving the public more say in Forest Service policymaking. However, their responses also reflect caution about having this go too far in terms of overruling the judgments of resource professionals. This cautious feeling appears to extend to the President and Congress as well. Also a majority of employees feel that identifiable interest groups, such as commodity and environmental

groups, have too much influence on Forest Service policy while the general public does not have enough.

Face-to-Face Negotiations

In large numbers, Forest Service employees expressed approval of using face-to-face negotiations with interest groups to build consensus and help make planning decisions. Specifically, employees were asked:

> In a number of locations, the Forest Service, as part of its planning process, has facilitated face-to-face negotiation among interest groups so that planning decisions could be made by consensus.
>
> Please tell me whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statement: Making planning decisions through this type of negotiation is a move in the right direction for the Forest Service.

The overwhelming majority of both line and staff (88 percent and 87 percent, respectively) agreed with this statement. Almost half (48 percent and 42 percent) "strongly" agreed.

Using an open-ended format, we followed this question by asking employees why they felt the way they did about the use of face-to-face negotiations. As can be seen in table 16, the vast majority gave positive reasons for using such negotiations. The most frequently mentioned reasons were that these negotiations are a good way to gauge public opinion and increase the range of ideas and options in the decision-making. Other frequent responses were that such an approach is the right thing to do in a democratic society that wishes to be responsive to the people, and that face-to-face negotiations are effective in clearing road blocks and building support for decisions. Two of the negative outcomes mentioned were that such negotiations exclude the interests of parties not present and that they can lead to technically or professionally unsound decisions.

Does Management Provide Enough Direction?

Earlier, we found that employees believe loss of direction and deterioration of leadership to be among some of the most important negative changes to occur in the Forest Service in the last 10 years. Among their recommendations for future changes were a significant number indicating that the Agency needs better leaders, a clearer vision and focus, and renewed credibility with the public.

Relevant to the issues associated with Agency leadership are those pertaining to the internal direction that Forest Service employees feel they receive. Table 17 shows responses to three questions that focused on the issue of whether employees believe they receive enough direction on the job. The vast majority of both line and staff employees believe that they do, although the two groups differ somewhat. For example, although the vast majority of both line and staff disagreed with the statement that Forest Service management does not provide enough direction and structure to guide day-to-day decisions and activities, staff employees were significantly less likely to "strongly" disagree. Also, a significantly greater proportion of staff than line were likely to agree with the statement. Although the vast majority of both line and staff strongly agreed with the statement that "In general, I know what I'm accountable for on the job," a slightly greater percentage of line than staff did so. Similar results were obtained for the statement "In general, the system provides appropriate feedback for me to know how I am doing on the job." Although in the minority, a significant proportion of both line and staff (16 percent and 24 percent, respectively) disagreed with this last statement.

Chapter 6

THE ENVIRONMENTAL ATTITUDES OF FOREST SERVICE EMPLOYEES

We saw earlier that a significant number of line and staff indicated that an increase in ecological and environmental sensitivity was a positive change in the Agency in the last 10 years and that they felt the increased emphasis on environmental concerns should continue. According to several observers, such as Kennedy (1988) and Tipple and Wellman (1991) the environmental movement and resulting environmental legislation have pressured the Forest Service to shift its emphasis away from managing timber and other commodity resource values toward managing non-commodity values such as wildlife and recreation. Legislation, court actions, workforce diversification efforts, and other events have caused some to speculate that the Agency has shifted to a decidedly more pro-environmental stance (e.g., Brown and Harris 1992a, Kennedy *et al.* 1992; McCarthy *et al.* 1991). However, others have argued that the Forest Service's values are still more in line with those of industry than with those of environmentalists (e.g., Twight and Lyden 1989). Nevertheless, there has been considerable interest in the environmental attitudes of the Forest Service as well as anticipation that changes in values will result in changes in Agency behavior and policy (Brown and Harris 1992a, McCarthy *et al.* 1991).

In this chapter, we examine the environmental attitudes of Forest Service employees in more detail. Our approach differs from that of earlier studies in a number of ways. First, rather than relying solely on attitude scales to make inferences about the environmental attitudes of Forest Service employees, we asked employees directly whether they considered themselves to be "environmentalists." We also asked them whether they had a "favorable" or "unfavorable" impression of environmentalists and why. Although we also used an attitude scale to examine environmental attitudes of employees, we modified our scale to include items we believe are uniquely appropriate to professional resource managers.

Finally, because there has been a fair amount of discussion about the impact of workforce diversification on Forest Service attitudes and perspectives (Brown and Harris 1993, Kennedy 1988, McCarthy *et al.* 1991) we also present information about the environmental attitudes of various subgroups in the Agency. Specifically, we compare the environmental attitudes of men and women, whites and minorities, and foresters and biologists.[2] We also compare the attitudes of employees who have worked in the Agency more than 20 years with employees who have worked 20 years or less. Further information about the views of various subgroups is provided in the next chapter.

Views of Environmentalists

One way we examined the environmental attitudes of Forest Service employees was by simply asking them whether they thought of themselves as "environmentalists." The overwhelming majority said "yes" (78 percent of the line and 65 percent of the staff; see table 18). We compared how the various subgroups answered this question, but as can be seen in table 18 differences in most cases were not statistically significant (alpha=0.05 or better). There were only two exceptions: a larger proportion of line than staff and a larger proportion of white line employees than minority line employees indicated they were environmentalists. There were no statistical differences between white and minority employees at the staff level, however.

We next asked employees whether they had a favorable or unfavorable impression of environmentalists. The majority of employees indicated their impression was favorable (see table 19), although a significant proportion indicated an unfavorable impression (over a third). As before,

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[2]*We categorized employees as "foresters" or "biologists" based on the major field of their most advanced college degree. Although other schemes have been used to specify professional identification, we believe this provides the least ambiguity about the nature of the professional backgrounds of Forest Service employees. Because of space limitations, we did not examine all professional groupings in this chapter. We selected foresters and biologists for comparison because previous studies show the greatest differences between these two professional groups (see, for example, Brown and Harris 1993, Kennedy 1985, McCarthy* et al. *1991).*

there were few statistically significant differences among subgroups in how they answered this question. Differences between line and staff as a whole were significant at the 0.05 level, but this was probably due to the somewhat larger proportion of staff employees than line who gave a response at the extreme ends of the scale (i.e., "very favorable" and "very unfavorable"). Overall, the proportions of line and staff who were favorably impressed were virtually identical.

We then asked an open-ended question about why employees felt the way they did about environmentalists. As before, we recorded verbatim responses and coded up to five distinctly different reasons given by each respondent. Table 20 contains the results. Because of space limitations, only results comparing line with staff employees are given.

As can be seen in table 20, the proportion of line and staff who gave reasons that reflected a positive view of environmentalists is about equal to the proportion who gave reasons that reflected a negative view. Many employees who indicated that they have a "somewhat favorable" impression of environmentalists in the earlier close-ended question nevertheless expressed negative views of the environmentalists on the later open-ended question. Specifically, 19 percent of the line and 24 percent of the staff did this.

Among the most frequently mentioned positive views of environmentalists were that they want to promote good management and have the best interest of the environment in mind. Other frequently mentioned positive views were that environmentalists are very committed and speak their convictions, they reflect the respondent's own concerns about the environment, and they have brought about needed policy changes. Three of the most frequently mentioned negative views were that environmentalists are extremists, they are subjective and speak with emotion rather than knowledge, and they are dominated by single interests.

The Modified New Environmental Paradigm Scale

To further measure the environmental attitudes of Forest Service employees, we asked respondents to rate how they agree or disagree with a series of statements about various views of the relationship of society, nature, and the environment. These statements are listed in table 21. The first four are those that have been widely used in Dunlap and Van Liere's "New Environmental Paradigm" scale (1978) to measure public attitudes about the environment. The last three statements were constructed specifically for this survey to broaden the range of views contained in the New Environmental Paradigm scale.

Table 21 shows that the majority of line and staff tend to take a "pro-environmental" position on most of the statements. For example, a majority agreed that "there are limits to growth beyond which our industrialized society cannot expand" and disagreed that "nature's resources are vast and thus there is little likelihood that humans will exhaust them in the near future." Nevertheless, there were statistical differences between line and staff.

Although the majorities agreeing or disagreeing with the various statements tended to be in the same direction for line and staff, the size of those majorities and the degree of agreement or disagreement often differed. For four of the six statements where differences were statistically significant, staff employees indicated a stronger pro-environmental stand than line. For example, although majorities of both line and staff employees agreed that "human interference with nature often produces disastrous consequences," a significantly greater proportion of staff than line were likely to "strongly agree." Likewise, although majorities of both line and staff disagreed that "society will have plenty of warning to make adjustments before any lasting harm is done to the environment," a larger proportion of staff than line disagreed "strongly." Staff employees were equally divided in their agreement or disagreement with the two statements: (1) "humans have the right to modify the natural environment to suit their needs" and (2) "nature is resilient and readily recovers when disturbed." However, a majority of line employees took the "anti-environmental" stand on these statements (i.e., the majority agree with them).

Nevertheless, on two of the six statements, line officers were more likely than staff to take the pro-environmental position. A larger proportion

of line than staff agreed with the pro-environmental statement that "there are limits to growth beyond which our industrialized society cannot expand" and disagreed with the anti-environmental statement that "nature's resources are vast and thus there is little likelihood that humans will exhaust them in the near future."

Generally, the statements on which staff are more likely to take a pro-environmental stand involve beliefs about human prerogatives and abilities to manipulate and modify the environment. Staff appear to be less optimistic than line about the consequences of human actions on the environment. Line officers, on the other hand, appear to be somewhat more concerned about limits on natural resource supplies.

Subgroup Comparisons

Although we did not find many differences between subgroups in the Forest Service in whether people considered themselves environmentalists or whether they had a favorable or unfavorable impression of environmentalists, we did find some differences in views about items in the modified New Environmental Paradigm scale. Differences were most pronounced between men and women and least pronounced between minority and white employees. However, as before, the various groups did not necessarily hold opposing viewpoints. Rather, differences among groups tended to be in the size of the majorities agreeing or disagreeing with a statement and in the degree of agreement or disagreement. As before, the majority of all groups tended to take a pro-environmental stand on most of the statements.

Table 22 compares the responses of men and women in the Agency to the seven statements. As can be seen, differences between men and women were statistically significant in nearly all cases, with women more likely to take the pro-environmental side of the issue. The only exception is with the statement "there are limits to growth beyond which our industrialized society cannot expand." A larger proportion of men than women **staff** were likely to "strongly agree" with this statement. However, a larger proportion of women than men **line** strongly agreed.

In striking contrast to the gender differences found, few statistically significant differences were found between the responses of minority and white employees (see table 23). A larger proportion of white than minority staff strongly disagreed with the anti-environmental statements "nature's resources are vast and thus there is little likelihood that humans will exhaust them in the near future" and "society will have plenty of warning to make adjustments before any lasting harm is done to the environment." Likewise, a larger proportion of white staff than minority staff strongly agreed with the pro-environmental statement "there are limits to growth beyond which our industrialized society cannot expand." However, an overall larger proportion of minority line than white line agreed with that statement. No statistically significant differences were found for the remaining 10 comparisons.

Table 24 compares the responses of employees whose most advanced college degree is in forestry with the responses of those whose most advanced college degree is in biology. As can be seen, the results are somewhat mixed. In only about half the cases were differences between foresters and biologists statistically significant. However, in each of those cases, biologists are more likely to take the pro-environmental stand than foresters.

Finally, table 25 compares employees with 20 years of service or less with employees with more than 20 years in the Agency. Years of service appears to make more of a difference in the environmental attitudes of line employees than it does for staff. For all but one statement, newer line employees are more likely to take the pro-environmental position than older line employees. In contrast, few differences between newer and older staff employees were found to be statistically significant. There were only two exceptions. Newer staff employees are significantly more likely to disagree that "nature is resilient and readily recovers when disturbed." At the same time, they are significantly more likely to agree that "humans must live in harmony with nature in order to survive."

Summary

In summary, we found that the majority of both line and staff employees consider themselves "environmentalists," take a pro-environmental position on most of the statements contained in the modified "New Environmental Paradigm" scale, and have a favorable impression of environmentalists. However, when employees were asked to be more specific about this last statement, the split between positive and negative views of environmentalists tended to be more evenly divided.

Although differences were found in views among subgroups in the Forest Service, these differences were not as great as we initially anticipated. Few differences were found in subgroups' self-identity as environmentalists or their impression of environmentalists. However, some significant differences **were** found among subgroups in their position on the environmental attitude items; men and women employees exhibited the greatest contrast in views, and minority and white employees exhibited the least.

Differences among Agency subgroups in their perspectives and views are further explored in the next chapter.

Chapter 7

WORKFORCE DIVERSIFICATION IN THE FOREST SERVICE

Because of the recent discussion of diversification in the Forest Service by gender, race, and professional background and because of the anticipation that such diversification will increase the range of new ideas brought into the Agency, we closely examine this topic in this chapter. In the previous chapter we examined subgroup differences in environmental attitudes and found the differences to be statistically significant in a number of cases. In this chapter we focus on differences among subgroups in their perceptions of the seriousness of the issues facing the Forest Service. We also examine differences among subgroups in their perceptions of whether the Agency is committed to deal with those issues, whether Agency policies represent changes in policies over the past 10 years, whether these changes are for the better, and whether the Agency should take further action on some important issues. As before, we focus on the issue statements contained in the 1990 RPA Strategic Plan.

First, however, we begin by examining the extent of diversification that currently exists in the Forest Service.

The Extent of Workforce Diversification in the Forest Service

Figures 12, 13, and 14 provide an initial view of the extent of diversification in the Forest Service. Information is broken out for line and staff employees. They show that there is currently much greater diversification in the staff than in line levels. Women make up only 12 percent of all line employees compared to 37 percent of the staff. Likewise, minorities make up only 8 percent of the line versus 13 percent of the staff.

When we look at the composition of line and staff employees based on professional background, a similar pattern emerges. Figure 13 represents the proportions of line and staff employees who received their most recent degree (or highest degree) in the disciplines or major fields indicated.[3] These fields include forestry, biology, range science (for line only since few staff received their most recent degree in this area), other natural resource management fields, the physical sciences or engineering, and the social sciences or humanities (for staff only because few line obtained their most recent degree in this area). (See Appendix for a list of the subfields that make up each of these categories.)

As can be seen in figure 13, forestry dominates the fields in which line employees received their most recent degree—about 60 percent of line obtained their most recent or highest degree in forestry. In contrast, only 20 percent of all the staff (or 36 percent of the staff with college degrees) have done so. Furthermore, 90 percent of line employees received their most recent degree in a natural resource field (forestry, range, biology, or other) compared to 64 percent of the staff who have degrees. There is virtually no one in a line position that claims a degree in the social sciences or humanities as his or her most recent degree. This contrasts with 16 percent of the college graduates among staff.

Table 26 indicates the proportion of all line and all staff who have **any** of their degrees—bachelor's, master's, or doctorate, most recent or otherwise—in the disciplines or major fields indicated. Because it is possible to have multiple degrees, the proportions indicated for each field are somewhat greater than those indicated in figure 13. Nevertheless, the same patterns emerge as in the distribution of fields based on the most recent degree earned. Forestry degrees dominate among both line and staff, but much less so among the latter.

Thus, greater diversity exists among staff employees than line in terms of gender, race, and professional background. We also found greater diversity at the staff level in terms of length of service (fig. 14). We found that only 6 percent of the line entered the Forest Service within the past 10 years compared to 31 percent of the

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[3]Several schemes have been devised by various researchers to identify the professional backgrounds of Forest Service employees. We believe our approach results in the least ambiguity because the highest or most recent degree obtained reflects not only the actual training of the employee but also his or her likeliest professional interests and identity.

staff. The difference is largely due to the time required for promotion into line positions. Nevertheless, the new (and younger) employees (who may bring with them new ideas), are currently concentrated in the staff levels of the Agency.

Additional information about the composition and extent of diversification within the Forest Service is given in tables 27 to 33. For example, table 27 gives background information on various hierarchical positions in the Agency. The categories "upper line" to "lower staff" are as defined in Chapter 2. By making a finer distinction among hierarchical levels, we may get a better picture of the extent of diversification that has occurred in the Forest Service. It is clear from this analysis that the vast majority of women and minorities are concentrated in the lower levels of the Agency. A professional background in forestry tends to dominate the upper levels. However, when we look at the proportion of employees who plan to retire within the next 10 years, we see opportunities for new people to enter into leadership positions. Fully two-thirds of the upper line employees plan to retire in the next 10 years, while nearly half of the lower line and upper staff intend to do so.

Tables 32 and 33 also may provide some insight into the likely characteristics of the Agency in the future. There are much larger proportions of women in the category of recent hires than in categories of longer service. Fully 45 percent of the line officers and 63 percent of the staff employees hired within the past 10 years are women. Obviously, these figures alone do not indicate how many of these women will remain in the Forest Service, and it also should be kept in mind that line employees with 10 years or less of service currently make up only about 6 percent of the line. Also note that many of the new hires among staff are in the lowest level positions, and many of these are unlikely to be promoted into line positions in the future. Nevertheless, these figures provide evidence of the changing characteristics of the Forest Service. And to the extent that different groups bring with them differing views and ideas, their increasing numbers may diversify views in the Agency. Next, we will examine the extent of differences in views among subgroups currently in the Forest Service.

Differences in Views Among Subgroups in the Agency

Differences based on hierarchical position

Figures 15 through 18 show the differences among the five hierarchical groups, from upper line to lower staff, in their rating of items in four areas: the seriousness of the 11 RPA issues, the degree of Forest Service commitment to address these issues, the possible change in policy over the past 10 years as represented by 1990 RPA policies, and the possible need for further action on five key issues from the RPA list. Clear patterns emerge.

Generally, employees at the upper end of the Forest Service hierarchy are less likely than those at the lower end to rate the issues as "very serious." They are more likely, however, to feel that the Agency is "very committed" to addressing these issues and more likely to feel that 1990 RPA policies regarding these issues represent changes in policies over the past 10 years.[4] At the same time, they are also more likely to feel that further actions are nevertheless needed to address these issues. In nearly all cases, differences among these five groups in the way they responded to the items are statistically significant (0.05 level of significance or better). However, as before, in most cases differences are mainly in degree rather than in the direction of opinion. For example, even though we found that the upper **staff** group has the smallest proportion of employees who think the Forest Service is "very committed" to improving water quality and upper **line** has the largest, the majority of all five groups believe the agency is at least "somewhat committed."

Finally, we compared the five groups in their views concerning below-cost timber sales and clearcutting. As can be seen in figures 19 and 20, there was considerable variation among the

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[4]As indicated in Chapter 3, the vast majority of employees who perceived 1990 RPA policies to be different from policies over the past 10 years believe these changes are for the better. Because of the added complexity of graphing responses for multiple subgroups and the effect on the legibility of the figures, figure 17 displays only percentages for those who indicated that 1990 policies represent "change" rather than the percentages who indicated the 1990 policies are "much better" or "somewhat better" than the policies over the past 10 years.

groups in their views about whether below-cost sales are justified and whether clearcutting is an acceptable management practice. About 90 percent of the upper line believe below-cost sales are justified and that clearcutting is an acceptable practice (specifically, 96 percent and 88 percent, respectively on these two issues). But only about half of the lower level staff think so (55 percent and 42 percent, respectively on the two issues). On the other hand, there was very little variation among the five groups in their views about whether there are too many below-cost sales on the National Forests or too much clearcutting (figs. 19 and 20). Fifty-six percent of the upper line think there are too many below-cost sales and 48 percent of the lower staff think so. At the same time, 75 percent of the upper line feel there is too much clearcutting compared to 65 percent of the lower staff.

Differences in views by gender

We also found differences in views between men and women in the Agency (figs. 21 through 26). Women in general, whether line or staff, are more likely than men (line or staff) to feel that the issues represent a "very serious problem." Men, on the other hand, are more likely than women to think the Forest Service is "very committed" to solving these issues. In most cases, these differences were statistically significant.

Differences between men and women in their views about other issues were less clear, however. For example, while significantly greater proportions of male staff than female staff feel that 1990 RPA policies represent changes in policies over the past 10 years, the differences between male line and female line were not statistically significant. Likewise, although female line are more likely than male line to indicate that further actions are needed on five key issues (threatened and endangered species, the condition of rangelands, old-growth, below-cost sales, and clearcutting), male staff are more likely than female staff to indicate so.[5]

[5]*That female staff are less likely than male staff to indicate that RPA policies represent changes in policies over the past 10 years and less likely to indicate that further actions are needed may reflect the disproportionate number of women concentrated in the lower staff positions, where employees are less likely to be knowledgeable about the RPA issues and policies.*

Men's and women's views on below-cost timber sales and clearcutting are also mixed (figs. 25 and 26). Significantly greater proportions of men line and staff than women line and staff feel that clearcutting is an acceptable management practice. However, although a greater proportion of the male staff than female staff are likely to feel that below-cost timber sales are justified, there was no significant difference in views between male line and female line on this issue. Likewise, although a greater proportion of female line than male line feel that there are too many below-cost sales, a larger proportion of male staff than female staff feel that way.

Differences in views by race

Differences in views were found to be much smaller between minority and white employees than between women and men (figs. 27 through 32). In virtually none of the cases were differences between minority line and white line employees found to be statistically significant. However, differences between minority staff and white staff employees were statistically significant in many cases. In general, minority staff were significantly more likely than white staff to rate the RPA issues as "very serious." And, in contrast to the trend found in gender differences, they were also significantly more likely to indicate that the Forest Service is "very committed" to addressing these issues.

Although in most cases there were also significant differences between minority and white staff in their likelihood of indicating that RPA policies represent changes in policies over the past 10 years, no clear pattern to the responses emerged. Whether minorities or whites were more likely to perceive changes varied with the issue (fig. 29). Few significant differences were found between minority and white staff employees in their views about the need for further actions on key RPA issues or their views about below-cost timber sales and clearcutting (figs. 31 and 32).

Differences in views by discipline

Clear differences in views based on professional training were found. Figures 33 through 44 indicate responses for employees whose most recent degrees were obtained in the fields indicated. These fields are defined as before. Generally, the greatest differences found were between

trained foresters and biologists (again, based on the most recent degree obtained). As a rule, biologists are more likely to view the RPA issues as "very serious" and foresters are less likely to do so. At the same time, foresters are more likely to feel that the Agency is "very committed" to addressing the issues.

At the line level, range scientists tend to have views similar to those of foresters. Persons with "other" natural resource degrees (other than forestry, range, or biology) tend to have views more similar to biologists. Those line employees with most recent degrees in the physical sciences or engineering tend to be closer in their views to foresters and range scientists, although this was not always the case. Few statistically significant differences were found among the disciplinary groups in their views about the extent of changes represented by 1990 RPA policies. However, biologists are somewhat more likely than others to indicate that further actions are needed on the five key RPA issues. Foresters are more likely to indicate that in some cases below-cost timber sales are justified and that clearcutting is an acceptable management practice.

At the staff level, those with recent degrees in the social sciences or humanities tend to be most similar in views to biologists. Those with recent degrees in "other" natural resource fields (other than forestry and biology) also tend to be similar to biologists. Those with recent degrees in the physical sciences or engineering as well as those with no college degree tend to be more similar to foresters. Staff employees with recent degrees in biology, "other" natural resource fields, and the social sciences and humanities are more likely to view the RPA issues as "very serious" and less likely to feel the Forest Service is "very committed" to addressing the issues, compared to employees with recent degrees in forestry, the physical sciences or engineering, or to those with no degree. Although differences among groups were statistically significant, no clear pattern emerges in differences in views concerning the extent that 1990 RPA policies represent changes in policies over the past 10 years. However, biologists are the group most likely to feel that further actions are needed on the five key issues. And as with the line employees, staff employees with recent degrees in forestry are most likely to indicate that below-cost timber sales are justified and that clearcutting is an acceptable management practice (figs. 41 through 44).

Differences in views by years of service

Finally, we examine differences in views based on years of service in the Agency (figs. 45 through 56). Patterns are clear and striking. Line and staff employees with the fewest years of service are most likely to view the RPA issues as "very serious" and least likely to feel that the Forest Service is "very committed" to addressing the issues. Generally, employees with the most years of service are more likely to indicate that the 1990 RPA policies represent change. At the same time, newer employees are more likely to indicate that further actions are needed to address the five key issues. Newer employees are also less likely to view below-cost timber sales as justified or to view clearcutting as an acceptable management practice.

Summary

In this chapter, we examined the extent of diversification in the Forest Service by gender, race, and professional training. We also examined how views concerning the 1990 RPA issues vary by these same background characteristics as well as by hierarchical position and years of service.

Generally, we found greater diversification at the staff rather than line levels of the Agency. Also, although there are proportionately more women and minorities at the staff level, they are currently concentrated in the lower level positions. Nevertheless, among recent hires (i.e., those within the past 10 years) are greater proportions of women and non-foresters than among those hired more than 10 years ago. Also, greater proportions of women, minorities, and non-foresters plan to be working for the Agency 10 years from now, compared to their counterparts. Larger proportions of retirements are planned among upper line and upper staff than at other levels in the next 10 years, indicating potential opportunities for non-traditional employees to move into leadership positions.

Will diversification of employees diversify views in the Forest Service? We did find differences in perspectives among the subgroups. Differences by hierarchical position, gender, professional training, and years of service were particularly evident; differences by race were less so. Generally, we found persons in the lower levels of the Agency, persons with fewer years of service,

women, and those with non-traditional degrees more likely to view the 1990 RPA issues as very serious problems. At the same time, these groups are less likely to feel the Agency is very committed to address these issues. Generally, the pattern observed earlier—that views about the seriousness of issues are inversely correlated with views about the Agency's commitment to address these issues—was repeated in the sub-group analyses.

Patterns are less clear in differences in views among subgroups concerning the extent of change represented by RPA policies and the need to take further actions. Generally, employees in the upper levels of the Agency hierarchy and those with the most years of service are most likely to perceive change. Upper level employees are also among those most likely to perceive the need to take further actions. However, within line and staff groupings newer employees and those with their most recent degrees in biology are more likely than their counterparts to perceive the need to take further actions. Patterns of differences in views about change and the need for further actions are less clear between men and women and between white and minority employees in the Forest Service.

The observed differences in views among subgroups, such as men and women, minorities and whites, and foresters and biologists, may be the result of differences in some basic underlying factors that have a more direct impact on employee views, such as differences in years of service or placement in the Agency's hierarchy. This is suggested as tables 27 to 33 indicate that women, minorities, and non-foresters are concentrated in the lower levels of the Forest Service and/or have the fewest years of service. The inter-correlations of background characteristics and their possible effect on employee views are currently being explored by the study investigators.

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Table 1.—*Distribution of sample of employees by hierarchical positions*

Hierarchical position	In work force	In sample
Upper Line		
Number	209	185
Percent	1	10
Lower Line		
Number	801	680
Percent	2	38
Total Line		
Number	1,010	865
Percent	3	48
Upper Staff		
Number	6,548	282
Percent	19	16
Middle Staff		
Number	19,540	521
Percent	56	29
Lower Staff		
Number	7,732	141
Percent	22	8
Total Staff		
Number	33,820	944
Percent	97	52

Table 2.—*Demographic and background information for Forest Service line and staff employees*

	Line	Staff
Percent of all permanent employees	3	97
Demographics — Percent of line or staff who are:		
Men	88	63
Women	12	37
White	92	87
Nonwhite	8	13
Education — Percent of line or staff who have:		
High school diplomas	100	98
Bachelor's degrees	100	55
Master's degrees	37	15
Doctor's degrees	18	3
Average years of service	21	16
Average age	47	43
How familiar are you with the RPA Strategic Plan?	(In percent)	
Very familiar	11	2
Somewhat familiar	48	14
Only a little familiar	30	21
Not at all familiar	11	63
How much input do you have in forest planning?	(In percent)	
A great deal	36	6
Some	22	11
Only a little	3	7
None	39	77

Table 3.—*Percent of Forest Service employees giving the following responses to "What do you think have been the most important positive changes in the Forest Service over the past 10 years?"*[1]

Response	Line	Staff
Increased responsiveness to the public; increased use of public involvement (72,74,75,76,77,78)[2]	39.9	29.0
Increased emphasis on non-commodity uses; decreased emphasis on commodity uses (1,2,3,4,5,6,8,9,11)	30.1	31.0
Diversification of the work force (51)	17.6	15.6
Better work conditions, better communications; more openness (52,53,55,57,58,60,61,65,69) More freedom for employees to express views; more decentralization, participative management; more openness in Agency to change	17.3	12.6
Increased environmental awareness/sensitivity (19)	10.0	14.9
Increased emphasis on ecosystem/biological diversity (7) Managing for entire ecosystem; managing for biological diversity	10.5	6.8
Improvements in the planning process (30,39,40,42,47)	8.7	6.3
More balanced programs; better resource balance(10) Better balance between commodity and non-commodity programs	9.2	3.7
More disciplines involved in planning/decisionmaking (45) Diversification in disciplines; more non-forestry disciplines involved	8.0	5.3
Increased emphasis on forest plans (36,37) Better implementation/monitoring of forest plans	6.8	3.3
Increased emphasis on multiple use; more honest attempt to implement multiple use (13)	3.8	5.8
Increased concern about soil and water quality (16) Stronger soil and water standards/guidelines	2.5	4.5
Other/miscellaneous[3]	33.4	35.6

[1]*The percentages in tables 3 and 4 indicate the percent of all line and the percent of all staff who gave a response in the indicated category; categories are listed in order of frequency of line employees' responses.*

[2]*Numbers in parentheses correspond to the numerical codes for responses to Question D6 listed in the Appendix. Categories in this table are the result of aggregating the indicated responses.*

[3]*This category is the result of aggregating all other responses not included in a previous category of this table. In most cases, individual responses making up this category are those mentioned by less than 2 percent of line and staff or those lacking sufficient specificity and clarity. Numerical codes for the individual responses are too numerous to list here but can be found in the Appendix; they include any and all codes not indicated in a previous category.*

Table 4.—*Percent of Forest Service employees giving the following responses to "What do you think have been the most important negative changes in the Forest Service over the past 10 years?"*[1]

Response	Line	Staff
Increasing political pressure on Agency; outside interference (1,4,6,8,9,20,22,23)[2] Political pressure to maintain/increase timber/commodity outputs; Congressional micromanagement; conflicting demands from outside groups	23.8	14.7
Loss of direction/mission; poor leadership (161,253,254,255,257, 258,260,262,263,274,275,278) Losing track of goals; don't anticipate problems; lack of ability to make and implement decisions; failure to take stand on important issues	18.2	12.0
Agency becoming overly responsive to political pressure; moving away from sound scientific management (2,21,108,159)	13.8	9.7
Too much red tape, paperwork, procedures; too many obstacles to getting the job done (151,154,155)	8.6	4.2
Affirmative action; work force diversity; reverse discrimination (201,202,203,206,213) Implementation of work force diversity handled badly	7.8	10.9
Insufficient funding (301,304,307)	7.8	7.7
Poor work conditions; low morale; (205,208, 209,210,211,212,215,216,256) Insufficient staff; employees overworked; low pay; stress	6.6	6.8
Too many appeals and litigation (152)	7.3	3.7
Continued or increased commodity emphasis; commodity outputs still too high (100,101,102,109,112) Continued emphasis on timber and other commodities	5.0	6.9
Loss of public confidence/support (351,352)	4.4	3.3
Other/miscellaneous[3]	36.0	36.5

[1] *The percentages in tables 3 and 4 indicate the percent of all line and the percent of all staff who gave a response in the indicated category; categories are listed in order of frequency of line employees' responses.*

[2] *Numbers in parentheses correspond to the numerical codes for responses to Question D7 listed in the Appendix. Categories in this table are the result of aggregating the indicated responses.*

[3] *See note 3 in table 3.*

Table 5.—*Percent of Forest Service employees giving the following responses to "What further actions do you think the Forest Service should be taking regarding threatened and endangered species?"*[1]

Response	Line	Staff
Better inventorying & monitoring (7,13)[2]	14.2	9.0
Identify species; monitor and update list	(25.2)[3]	(19.1)
More research (2)	14.2	9.8
Gain better understanding of problems/implications	(25.1)	(20.8)
Take holistic/ecosystem approach (21,32)	8.7	3.9
Manage for entire ecosystem, not for single species	(15.3)	(8.3)
Increase commitment to protection/recovery (23,26)	6.6	7.1
Be more aggressive in protecting/improving habitat; increase commitment to recovery	(11.6)	(15.1)
Better coordinate among units/agencies (9)	5.9	2.5
	(10.5)	(5.2)
Be more proactive in planning & enforcement (22,30)	5.9	5.5
Anticipate/plan for species before they become threatened; implement laws, policy faster/better; improve enforcement	(10.4)	(11.7)
Need increased funding (28,71)	5.3	3.9
Including more support for staff on the ground	(9.3)	(8.2)
Decrease emphasis on commodities/increase on T&E and other non-commodities (41,43,44,46)	3.4	6.3
Give higher priority to T&E, wildlife, wilderness, old-growth; less emphasis on timber and other commodity production	(6.1)	(13.4)
Develop better programs & planning (3)	3.3	2.4
Define procedures; use scientific information on species and habitat	(5.8)	(5.2)
Other/miscellaneous[4]	16.2	18.8
	(28.7)	(40.1)

[1] *The percentages indicate the percent of all line and the percent of all staff who gave a response in the indicated category, and categories are listed in order of frequency of line employees' responses.*

[2] *Numbers in parentheses correspond to the numerical codes for responses to Question C22A listed in the Appendix. Categories in this table are the result of aggregating the indicated responses.*

[3] *Numbers outside of parentheses represent percent of all 865 line and percent of all 944 staff in the sample. Numbers inside parentheses represent percent of the 491 line and percent of the 454 staff who indicated further actions are needed.*

[4] *See note 3 in table 3.*

Table 6.—*Percent of Forest Service employees giving the following responses to "What further actions do you think the Forest Service should be taking regarding the condition of rangelands?"*

Response	Line	Staff
Reduce or eliminate grazing (8,28,35,91)[1]	15.8%	17.8%
Reduce/monitor number of permits and length; reduce season; reduce AUMs; eliminate grazing where necessary; eliminate altogether	(24.3)[2]	(35.8)
Better implement policy; strengthen enforcement (11,24)	12.2	9.5
Provide stronger guidelines/standards; implement policies faster	(18.7)	(19.0)
Increase funding (71)	12.0	3.3
	(18.5)	(6.6)
Provide better protection for riparian areas (29)	7.0	5.8
	(10.7)	(11.7)
Increase fees (1)	6.8	5.7
	(10.5)	(11.5)
Provide better protection/maintenance/improvement of rangelands (30)	5.9	3.1
	(9.1)	(6.3)
Improve allotment/range management plans (3)	4.8	2.4
	(7.3)	(4.7)
More research (2)	4.7	3.9
Gain better understanding of problems/implications	(7.2)	(7.9)
Inventory/monitor rangelands/grazing (7)	4.3	4.2
	(6.6)	(8.5)
Put more people in the field; provide more resources (31)	4.0	1.9
Provide more resources/training/support for people on the ground	(6.2)	(3.9)
Monitor users; educate permittees (12)	3.8	2.9
Educate/monitor permittees; users need to be more responsible	(5.8)	(5.9)
Stop subsidizing grazing interests (72)	2.8	1.7
Less bowing to commodity group pressure	(4.2)	(3.5)
Stand up to Congressional/political pressure (73,75)	2.7	1.8
	(4.1)	(3.6)
Manage for entire ecosystem; maintain biodiversity (21,37)	2.4	1.3
	(3.7)	(2.6)
Balance competition between wildlife uses and grazing (41)	2.2	3.0
	(3.4)	(6.0)
Publicize good management practices (62)	2.0	0.9
Communicate with the public; publicize the problem	(3.0)	(1.8)
Other/miscellaneous[3]	13.1	11.5
	(20.2)	(23.0)

[1] *Numbers in parentheses correspond to the numerical codes for responses to Question C26A listed in the Appendix. Categories in this table are the result of aggregating the indicated responses.*

[2] *Numbers inside parentheses represent percent of the 563 line and percent of the 492 staff who indicated further actions are needed.*

[3] *See note 3 in table 3.*

Table 7.—*Percent of Forest Service employees giving the following responses to "What further actions do you think the Forest Service should be taking regarding old-growth forests?"*

Response	Line	Staff
More research (1)[1]	12.4	8.1
Gain better understanding of problems/implications	(21.6)[2]	(16.2)
Identify/inventory/monitor old-growth (7)	12.4	6.3
	(21.5)	(12.5)
Develop better definition of old-growth (3)	10.7	4.8
	(18.6)	(9.6)
Manage for entire ecosystem; take holistic approach (21,38)	6.0	3.9
Protect biodiversity	(10.4)	(7.7)
Increase commitment to protecting old-growth (24,26)	5.8	7.2
Implement policy faster/better; enforce more strictly	(10.1)	(14.3)
Develop overall management plan for old-growth (4)	4.9	3.5
Old-growth needs to be serious component of forest plans	(8.6)	(6.9)
Identify and set aside areas for protection (14,23)	4.4	4.6
Set aside lands to grow old-growth; develop older trees; increase rotation length; replace old-growth	(7.6)	(9.1)
Educate the public (63)	3.3	1.6
Make issue less emotional	(5.7)	(3.2)
Implement regional/zone planning (13)	3.0	0.7
	(5.2)	(1.4)
Decrease timber harvests/targets (43)	2.5	3.4
	(4.4)	(6.7)
Should not/cannot save all old-growth (90)	2.2	2.8
	(3.9)	(5.6)
Preserve all remaining old-growth (35)	2.1	7.0
	(3.6)	(13.9)
Other/miscellaneous[3]	18.2	18.9
	(31.6)	(37.7)

[1] *Numbers in parentheses correspond to the numerical codes for responses to Question C30A listed in the Appendix. Categories in this table are the result of aggregating the indicated responses.*

[2] *Numbers inside parentheses represent percent of the 499 line and percent of the 486 staff who indicated further actions are needed.*

[3] *See note 3 in table 3.*

Table 8.—*Percent of Forest Service employees giving the following responses to "What further actions do you think the Forest Service should be taking regarding below-cost timber sales?"*

Response	Line	Staff
Educate public/Congress on benefits of/need for BCTS (61)[1]	12.6 (21.3)[2]	4.4 (8.7)
Better explain/document benefits of BCTS (7) Determine benefits to other resources, including non-commodity	11.1 (18.8)	4.2 (8.4)
Develop better accounting system, better economic analysis (6,13,16,18) Identify timber sales costs that are shared with other programs such as recreation and wildlife; make better use of TSPIRS; improve TSPIRS	9.9 (16.7)	5.8 (11.7)
Reduce or eliminate BCTS (17,26,41,90) Make sure sales pay for themselves; increase commitment to reducing BCTS; eliminate BCTS; stop subsidizing timber industry	9.4 (15.9)	16.4 (32.8)
More research; better definition of what BCTS are (2) Better define when BCTS are justified; better identify the goals of a particular sale	6.6 (11.1)	4.4 (8.8)
Retain BCTS where necessary to benefit other resources/the environment (27,52)	6.1 (10.3)	3.7 (7.4)
Develop clearer/better policy; provide clearer leadership (9)	3.2 (5.4)	1.4 (2.8)
Retain BCTS as profit is not part of FS mandate (1,4) Economics should not be so important	2.9 (4.9)	1.1 (2.2)
Cut costs; reduce work force; increase efficiency (10)	2.4 (4.1)	2.7 (5.5)
Assess effects of BCTS on local/national economy (15)	2.4 (4.1)	2.2 (4.4)
Other/miscellaneous[3]	14.5 (24.5)	13.2 (26.4)

[1] *Numbers in parentheses correspond to the numerical codes for responses to Question C35A listed in the Appendix. Categories in this table are the result of aggregating the indicated responses.*

[2] *Numbers inside parentheses represent percent of the 514 line and percent of the 481 staff who indicated further actions are needed.*

[3] *See note 3 in table 3.*

Table 9.—*Percent of Forest Service employees giving the following responses to "What further actions do you think the Forest Service should be taking regarding clearcutting?"*

Response	Line	Staff
Educate public/Congress on benefits of/need for clearcutting (61,74)[1]	18.3	9.2
Defend clearcutting policy	(31.8)[2]	(18.0)
Reduce or ban clearcutting (25,26,30,90)	8.6	14.7
Increase commitment to reducing clearcutting; reduce size of clearcut parcels; use clearcutting only when no other way; ban clearcutting	(15.0)	(28.8)
Retain clearcutting as a management tool (9,91)	7.0	4.9
Don't limit clearcutting	(12.2)	(9.7)
Conduct more research on alternative methods (2)	6.9	2.9
	(12.0)	(5.8)
Conduct more research on acceptability of clearcutting (1)	6.1	5.0
Provide clearer definition; identify where it should or shouldn't be done; identify optimal size, ecological impacts	(10.6)	(9.8)
Increase use of alternative methods (28,29)	5.4	6.7
Increase use of uneven-aged management; match method to needs of land	(9.4)	(13.1)
Improve clearcutting methods; make aesthetically more pleasing (27)	2.5	1.6
	(4.3)	(3.1)
Manage for entire ecosystem; take holistic approach (21)	2.4	0.8
	(4.2)	(1.6)
Other/miscellaneous[3]	17.6	16.6
	(30.7)	(32.6)

[1]*Numbers in parentheses correspond to the numerical codes for responses to Question C41A listed in the Appendix. Categories in this table are the result of aggregating the indicated responses.*

[2]*Numbers inside parentheses represent percent of the 497 line and percent of the 487 staff who indicated further actions are needed.*

[3]*See note 3 in table 3.*

Table 10.—*Percent of Forest Service employees giving the following responses to "What do you think is the single most important change that still needs to be made?"*

Response	Line	Staff
Increase emphasis on non-commodity uses/decrease emphasis on commodities (101,105,106,114,115,120,121,122,123,127)[1] Balance commodity development with environmental concerns; achieve better balance between commodities and non-commodities	14.0	16.4
Continue/increase public involvement efforts (1,13) Increase responsiveness to the public; increase sensitivity to public needs	9.8	6.4
Increase emphasis on ecological balance/environmental concerns (102,111) Increase emphasis on/manage for entire ecosystem	7.6	6.9
Stand up to political pressure (56) Defend policies; keep politics out; stand up to Congress and interest groups	5.0	5.0
Educate the public (4) Better inform the public/Congress	4.9	5.3
Manage for the best needs of the forest despite politics (113) Emphasize stewardship/commitment to the land	4.7	3.6
Get better, more ethical leadership (307)	3.7	2.1
Provide budget for implementation of forest plans (503)	3.5	1.3
Emphasize district level decisions/planning (304) Provide authority at grass roots level	3.3	2.5
Redefine Forest Service mission, develop focus (302) Develop a vision; come to consensus on Forest Service mission	3.2	2.4
Regain leadership role, credibility with the public (6)	2.9	1.0
Decentralize decisionmaking; get rid of military structure (312) Institute bottom up decisionmaking; empower staff	2.8	1.6
Re-emphasize multiple use management/go back to basics (103,116,800) Re-emphasize managing resources; go back to way it was	2.5	2.9
Less interference/micromanagement from Congress (51,52) Congress shouldn't set targets; budget shouldn't be tied to targets	2.3	2.1
Increase general funding (501)	2.3	1.5
Increase funding for on-the-ground work (502)	2.2	1.0
Implement current plans (316) Make sure people on ground are aware of/following plans	2.2	0.7
Promote work force diversity (401)	2.1	2.7
Change appeals process; reduce amount of litigation (8)	2.0	1.0
Change budgeting process (509) e.g., speed up process, provide multi-year funding	2.0	0.7
Increase commitment/follow through on policy changes (305) Do what Forest Service says it will do; respond in timely manner	2.0	2.3
Increase emphasis on research (203)	1.3	2.5
Other/miscellaneous[2]	34.8	37.0

[1] *Numbers in parentheses correspond to the numerical codes for responses to Question D8 listed in the Appendix. Categories in this table are the result of aggregating the indicated responses.*

[2] *See note 3 in table 3.*

Table 11.—*Percent of Forest Service employees giving the following responses to "What do you think is the single greatest challenge facing the Forest Service today?"*

Response	Line	Staff
Responding to public wants (02)[1] Identifying and responding to what the public wants; responding to changing values/perceptions of public/society	23.4	17.4
Regaining public trust (01,03) Maintaining/regaining credibility, public trust; improving public image	12.3	8.9
Dealing with conflicting demands from external groups (28,43) Dealing with conflicting demands from different groups, including interest groups, Congress, and the public	12.3	8.7
Increasing ecological/environmental sensitivity (22,26,29,32,40) Responding to environmental/ecological concerns; maintaining biodiversity; managing for entire ecosystem; protecting endangered species	8.4	13.5
Balancing commodity and non-commodity uses (11) Maintaining proper balance between commodity and amenity/non-commodity uses	7.5	3.9
Moving away from stewardship because of politics (07,31,41,44,47) Needing to manage forests despite political pressures; getting politicians out of forest management; balancing proper management with public opinion	7.1	7.6
Maintaining multiple use management/resisting single use interests (19)	5.3	4.6
Regaining sight of Forest Service mission (68) Needing clear statement of mission, common direction; regaining sight of mission, direction	5.2	3.0
Educating the public (05) Educating the public; explaining programs/management methods	4.2	2.4
Adapting/responding to change (67) Overcoming difficulties/slowness in adapting to change	4.1	2.9
Workforce diversity (62,63,65) Dealing with workforce diversity; promoting workforce diversity; slowing down workforce diversity	3.9	7.1
Maintaining stewardship, high quality management (18) Maintaining high quality management, ethical resource management, stewardship	3.5	2.4
Funding constraints (45) Funding constraints, economic problems	2.1	5.3
Decreasing emphasis on commodity uses/increasing on non-commodity (20,23) Decreasing emphasis on timber and other commodity uses; increasing emphasis on non-commodities	2.1	3.9
Working conditions, morale (61) Working conditions, heavy workloads, morale, human resource management problems	1.7	4.5
Other/miscellaneous[2]	19.6	25.2

[1] *Numbers in parentheses correspond to the numerical codes for responses to Question A8 listed in the Appendix. Categories in this table are the result of aggregating the indicated responses.*

[2] *See note 3 in table 3.*

Table 12.—*Percent of employees who agree or disagree with various views related to the Agency's multiple use mission*

Views on Agency's mission	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree
Local economic concerns play too large a role in making multiple use management decisions					
Line	13	37	1	38	11
Staff	21	41	0	27	10
It is more important to manage Forest Service lands for local employment than for environmental quality					
Line	1	10	2	37	50
Staff	5	20	2	30	43
Agency should place less emphasis on multiple use development and more emphasis on preservation					
Line	4	14	1	27	54
Staff	13	25	1	28	31
Forest Service will be able to achieve its future multiple use objectives without harming the environment					
Line	28	47	1	20	5
Staff	17	42	1	28	11
In order to reduce multiple use conflicts, Forest Service should consider shifting to single or dual uses in some areas					
Line	19	38	1	16	26
Staff	22	48	1	13	13
Timber harvesting is usually the best way to enhance other multiple uses					
Line	8	30	2	41	20
Staff	9	29	1	35	25

Table 13.—*Percent of employees who agree or disagree with certain proposals and opinions pertaining to the Forest Service's mission*

Proposal/opinion	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree
International Forestry programs should receive increased emphasis					
Line	31	46	1	16	5
Staff	34	46	1	13	4
Forest Service should place greater emphasis on modifying the management of National Forest areas to complement activities on adjacent lands					
Line	14	43	2	25	15
Staff	21	45	1	21	12
Under current levels of use, it will be difficult to sustain resource capabilities for future generations					
Line	25	28	1	23	23
Staff	34	29	1	22	14

Table 14.—*Percent of employees who agree or disagree with various views related to public involvement and external pressures*

View	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree
Forest Service is responsive to public needs in determining multiple use objectives and priorities					
Line	42	50	0	7	2
Staff	32	56	0	10	2
In a democratic society, public preferences should ultimately prevail, even when they conflict with the judgment of resource professionals					
Line	13	38	1	34	15
Staff	7	28	0	43	22
The demands of interest groups are usually not consistent with sound resource management					
Line	17	44	1	33	5
Staff	26	45	1	24	4
Forest plan objectives are more important than Congressional intent for targets					
Line	48	33	1	13	5
Staff	44	35	1	13	6

Table 15.—*Percent of employees who believe that certain groups have too much or too little influence on Forest Service policy*

Groups	Far too much	Too much	About right	Too little	Far too little
The public					
Line	0	2	26	60	11
Staff	1	4	33	49	12
Environmental groups					
Line	12	49	32	7	1
Staff	18	43	25	11	2
Commodity groups (timber, grazing, mining)					
Line	15	61	21	3	0
Staff	15	45	28	9	1
Key members of Congress					
Line	28	51	19	2	0
Staff	31	48	15	4	1
The President and top level Administration officials					
Line	13	30	46	9	1
Staff	17	35	35	8	2
Forest Service line officers					
Line	1	8	62	26	2
Staff	6	18	55	17	2
Forest Service staff					
Line	2	23	57	16	1
Staff	2	17	52	26	3

Table 16.—*Percent of Forest Service employees giving the following responses to "Why do you agree or disagree with the statement '... that making planning decisions through face-to-face negotiation among interest groups so that planning decisions can be made by consensus is a move in the right direction for the Forest Service?'"*

Reason	Line	Staff
POSITIVE		
Good way to gauge public opinion, society's values (2)[1] Need to work with public/get public involved; need to incorporate society's values	25.4	23.1
Increases range of ideas/input (11) Introduces more options/ideas; results in better exchange of information	21.8	30.8
It's the right thing to do in a democratic society (6,31) Land belongs to the people; consensus management important in a democratic society	11.7	9.1
Only way to get anything done (1,16) Encourages/forces compromise, bargaining in good faith; clears road blocks to action	9.9	5.3
Develops broader support for decisions (22) All parties take ownership of outcome; creates "win-win" situation; reduces conflict/problems later	9.1	5.3
Results in better decisions/solutions (14,34) Leads to better resource balance, better forest management	8.4	4.8
Creates better dialogue among groups (12) Results in better understanding of opposing viewpoints	5.0	2.2
Avoids litigation (24)	5.0	3.9
Provides opportunity to inform/educate public (4) Helps public to better understand the issues	4.9	5.3
Puts Agency in touch with actual users/interested parties (15)	2.3	3.3
Improves Agency's credibility/relationship with the public (3)	1.8	2.3
NEGATIVE		
Leads to biased decisions (41,43,51) Parties present may not be representative; interest groups have too specialized interests; national perspective may be lost	9.1	7.9
Leads to professionally/technically unsound decisions (52,53,56,72) Input lacks scientific basis, based on emotion; goals are diluted through compromise; long-term effects are not considered	8.9	11.9
Process contains too many difficulties (42,62,65,66,67) Process takes up too much time, costs too much, is too politicized, hasn't worked well; people won't compromise, don't bargain in good faith	6.1	3.8
OTHER/MISCELLANEOUS		
Other/miscellaneous[2]	12.0	10.7

[1] *Numbers in parentheses correspond to the numerical codes for responses to Question D3A listed in the Appendix. Categories in this table are the result of aggregating the indicated responses.*

[2] *See note 3 in table 3.*

Table 17.—*Percent of employees who agree or disagree with various statements pertaining to the sufficiency of direction received from management*

	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree
Forest Service management does not provide people like me with enough direction and structure to guide day-to-day decisions and activities					
Line	1	5	0	27	66
Staff	7	20	1	35	37
In general, I know what I'm accountable for on the job					
Line	85	13	0	1	1
Staff	73	22	0	4	1
In general, the system provides appropriate feedback for me to know how I'm doing on the job					
Line	40	43	0	13	3
Staff	34	42	0	16	8

Table 18.—*Percent of Forest Service employees who think of themselves as environmentalists*

	Percent		Number in sample (unweighted)
LINE			
Total	78	***[1]	865
Women	82	NS[2]	111
Men	77		754
Minorities	63	**	71
Whites	79		794
Biologists	80	NS	86
Foresters	80		506
≤ 20 years of service	78	NS	412
> 20 years of service	78		453
STAFF			
Total	65		944
Women	61	NS	346
Men	67		598
Minorities	62	NS	126
Whites	65		818
Biologists	79	NS	73
Foresters	72		175
≤ 20 years of service	65	NS	689
> 20 years of service	65		255

NS = Not Significant

* $p < 0.05$
** $p < 0.01$
*** $p < 0.001$

[1] *Indicates that difference between line and staff (total) is statistically significant.*
[2] *Indicates that difference between women line and men line is not statistically significant.*

Table 19.—*Percent of Forest Service employees who have a favorable or unfavorable impression of environmentalists*

	Very favorable	Somewhat favorable	Neutral	Somewhat unfavorable	Very unfavorable	
LINE						
Total	7	57	0	30	4	* [1]
Women	8	65	0	25	0	NS[2]
Men	7	56	0	30	5	
Minorities	9	61	0	27	4	NS
Whites	7	57	0	30	5	
Biologists	12	63	0	23	1	NS
Foresters	7	54	0	32	6	
≤ 20 years of service	7	59	0	29	4	NS
> 20 years of service	7	56	0	30	5	
STAFF						
Total	9	54	0	28	8	
Women	10	54	0	28	7	NS
Men	8	55	0	28	8	
Minorities	12	58	0	19	7	NS
Whites	8	54	0	29	8	
Biologists	11	59	0	24	5	NS
Foresters	6	49	0	34	9	
≤ 20 years of service	9	56	0	27	7	NS
> 20 years of service	7	49	0	31	12	

NS = Not Significant

* $p < 0.05$
** $p < 0.01$
*** $p < 0.001$

[1] *Indicates that difference between line and staff (total) is statistically significant.*
[2] *Indicates that difference between women line and men line is not statistically significant.*

Table 20.—*Percent of Forest Service employees giving the following responses to "Why do you have a favorable (or unfavorable) impression of environmentalists?"*

	Line	Staff
POSITIVE		
Environmentalists want to promote good management, have best interest of environment in mind (13,17,21)[1] They want to use scientific information to improve forests; they want to preserve resources, protect world	9.1	7.6
They are very committed; they speak their convictions (27) They have good intentions	8.4	5.3
They reflect respondent's personal views/philosophy (22) Respondent thinks environmental concerns are important	6.6	11.7
They have led to heightened awareness of problems (1) They have pointed out mistakes/problems that are being made, changes that need to be made	6.4	7.0
They have brought about needed policy changes (11) They have made FS move in the right direction	4.9	2.1
They have presented other (non-FS, non-commodity) side of issues (3) They have provided balance	4.4	3.1
They are addressing critical issues (26) They have good ideas, an admirable cause	4.0	2.7
They have made FS more accountable (5) They ask questions and force FS to answer	2.6	1.4
They are better educated than they used to be (19) They know what they are doing	2.5	1.0
Other positive views	7.0	5.1
Total positive views	45.6	39.5
NEUTRAL		
Environmentalists are generally good, but some go to extremes (72,74,75) Environmentalists' goals are good, but not their methods; some groups are well-intentioned, others are not	12.4	13.2
Other neutral views	6.7	5.6
Total neutral views	19.0	18.8
NEGATIVE		
Environmentalists are extremists; have hidden agendas (31,32,35,36,41,45,47,54) They use unprincipled tactics; they are too radical, inflexible, politically motivated; they go overboard, distort issues, lie, are unethical	28.0	29.7
They are subjective, speak with emotion rather than knowledge (34) They use unscientific thinking, are naive	11.0	9.2
Single interests dominate; they don't think of the whole system (40)	5.4	5.2
Environmentalists are preservationists (52)	2.9	1.0
They impose unwise policies on land (51,53,55) They don't know how to manage resources; some of their actions increase costs to taxpayers; they want to stop human use of resources	2.0	3.2
They don t look at human/social costs of their actions (48)	1.2	2.5
Other negative views	5.8	8.2
Total negative views	43.0	45.7
OTHER/MISCELLANEOUS		
Other/miscellaneous[2]	4.7	4.2

[1] *Numbers in parentheses correspond to the numerical codes for responses to Question E15B listed in the Appendix. Categories in this table are the result of aggregating the indicated responses.*

[2] *See note 3 in table 3.*

Table 21.—*Percent of line and staff who agree or disagree with various views concerning society, nature, and the environment*

View	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree	
There are limits to growth beyond which our industrialized society cannot expand						
Line	53	38	0	6	2	***
Staff	45	40	0	10	3	
Humans must live in harmony with nature in order to survive						
Line	67	30	0	3	0	NS
Staff	69	27	0	3	0	
Humans have the right to modify the natural environment to suit their needs						
Line	13	54	1	20	12	***
Staff	10	40	0	24	25	
Human interference with nature often produces disastrous consequences						
Line	25	43	1	25	5	***
Staff	41	40	1	15	3	
Nature is resilient and readily recovers when disturbed						
Line	15	58	1	21	5	***
Staff	10	40	2	29	20	
Nature's resources are vast and thus there is little likelihood that humans will exhaust them in the near future						
Line	1	7	0	36	56	***
Staff	4	12	0	25	59	
Society will have plenty of warning to make adjustments before any lasting harm is done to the environment						
Line	3	18	0	41	38	***
Staff	4	16	0	31	49	

NS = Not significant
*** $p < 0.001$

Table 22.—*Percent of Forest Service men and women (by line and staff) who agree or disagree with various views concerning society, nature, and the environment*

View		Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree	
There are limits to growth beyond which our industrialized society cannot expand							
Line							
	Women	69	27	0	3	1	**
	Men	51	40	0	7	2	
Staff							
	Women	39	46	0	10	3	*
	Men	48	37	1	10	4	
Humans have the right to modify the natural environment to suit their needs							
Line							
	Women	5	48	1	30	15	*
	Men	14	55	1	19	11	
Staff							
	Women	7	35	0	29	29	**
	Men	12	43	1	21	23	
Nature is resilient and readily recovers when disturbed							
Line							
	Women	7	46	1	37	9	***
	Men	16	60	1	19	5	
Staff							
	Women	6	34	1	32	28	***
	Men	12	44	2	27	15	
Humans must live in harmony with nature in order to survive							
Line							
	Women	83	17	0	0	0	**
	Men	65	32	0	3	0	
Staff							
	Women	74	25	0	1	0	**
	Men	66	29	0	4	1	
Human interference with nature often produces disastrous consequences							
Line							
	Women	32	44	4	16	3	***
	Men	24	43	1	26	6	
Staff							
	Women	46	39	1	13	2	NS
	Men	39	40	1	16	4	
Nature's resources are vast and thus there is little likelihood that humans will exhaust them in the near future							
Line							
	Women	0	6	1	23	70	*
	Men	1	7	0	37	54	
Staff							
	Women	4	13	0	23	60	NS
	Men	4	11	1	26	59	
Society will have plenty of warning to make adjustments before any lasting harm is done to the environment							
Line							
	Women	1	8	0	32	59	***
	Men	3	19	0	42	35	
Staff							
	Women	5	12	0	27	56	**
	Men	3	18	1	33	45	

NS = Not Significant

* $p < 0.05$
** $p < 0.01$
*** $p < 0.001$

Table 23.—*Percent of Forest Service minority and white employees (by line and staff) who agree or disagree with various views concerning society, nature, and the environment*

View		Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree	
There are limits to growth beyond which our industrialized society cannot expand							
Line							
	Minority	51	45	0	3	0	**
	White	54	38	0	7	2	
Staff							
	Minority	31	44	1	14	8	***
	White	47	40	0	10	3	
Humans have the right to modify the natural environment to suit their needs							
Line							
	Minority	10	51	0	30	10	NS
	White	13	55	1	20	12	
Staff							
	Minority	13	37	1	21	28	NS
	White	10	40	0	24	25	
Nature is resilient and readily recovers when disturbed							
Line							
	Minority	11	48	0	31	10	NS
	White	15	59	1	20	5	
Staff							
	Minority	11	41	1	25	24	NS
	White	9	40	2	30	19	
Humans must live in harmony with nature in order to survive							
Line							
	Minority	72	25	0	3	0	NS
	White	66	30	0	3	0	
Staff							
	Minority	71	27	0	2	0	NS
	White	69	27	0	3	1	
Human interference with nature often produces disastrous consequences							
Line							
	Minority	21	48	1	23	7	NS
	White	26	43	1	25	5	
Staff							
	Minority	42	35	0	21	1	NS
	White	41	40	1	14	3	
Nature's resources are vast and thus there is little likelihood that humans will exhaust them in the near future							
Line							
	Minority	1	6	0	32	61	NS
	White	1	7	0	36	56	
Staff							
	Minority	8	23	0	20	49	***
	White	3	10	1	26	61	
Society will have plenty of warning to make adjustments before any lasting harm is done to the environment							
Line							
	Minority	4	16	0	41	39	NS
	White	3	18	0	41	38	
Staff							
	Minority	5	24	1	25	44	*
	White	4	14	0	32	50	

NS = Not Significant

* $p < 0.05$
** $p < 0.01$
*** $p < 0.001$

Table 24.—*Percent of Forest Service employees by discipline (and by line and staff) who agree or disagree with various views concerning society, nature, and the environment*[1]

View	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree	
There are limits to growth beyond which our industrialized society cannot expand						
Line						
Biologists	58	37	0	4	1	NS
Foresters	52	41	0	6	2	
Staff						
Biologists	72	21	0	5	2	*
Foresters	49	33	0	13	4	
Humans have the right to modify the natural environment to suit their needs						
Line						
Biologists	12	49	0	21	17	*
Foresters	15	55	0	20	10	
Staff						
Biologists	7	43	0	24	26	NS
Foresters	14	45	0	21	19	
Nature is resilient and readily recovers when disturbed						
Line						
Biologists	14	52	1	25	8	NS
Foresters	16	61	0	18	4	
Staff						
Biologists	11	41	0	33	13	NS
Foresters	15	53	0	23	9	
Humans must live in harmony with nature in order to survive						
Line						
Biologists	71	28	0	1	0	NS
Foresters	64	32	0	3	0	
Staff						
Biologists	87	10	0	2	1	***
Foresters	64	34	0	2	0	
Human interference with nature often produces disastrous consequences						
Line						
Biologists	34	45	0	18	8	*
Foresters	23	40	1	29	7	
Staff						
Biologists	50	32	1	11	5	*
Foresters	30	40	2	23	7	
Nature's resources are vast and thus there is little likelihood that humans will exhaust them in the near future						
Line						
Biologists	1	7	0	23	69	NS
Foresters	1	7	0	38	54	
Staff						
Biologists	2	2	1	28	66	NS
Foresters	2	10	0	27	60	
Society will have plenty of warning to make adjustments before any lasting harm is done to the environment						
Line						
Biologists	1	8	0	40	51	*
Foresters	3	21	0	42	34	
Staff						
Biologists	1	6	0	30	61	NS
Foresters	4	16	0	37	43	

NS = Not Significant

* $p < 0.05$

** $p < 0.01$

*** $p < 0.001$

[1] *Discipline is defined by major field of most advanced college degree.*

Table 25.—*Percent of Forest Service employees by years of service (and by line and staff) who agree or disagree with various views concerning society, nature, and the environment*

View	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree	
There are limits to growth beyond which our industrialized society cannot expand						
Line						
≤ 20 years of service	60	32	0	6	2	**
> 20 years of service	47	44	0	6	2	
Staff						
≤ 20 years of service	45	40	0	10	3	NS
> 20 years of service	45	41	0	10	3	
Humans have the right to modify the natural environment to suit their needs						
Line						
≤ 20 years of service	9	55	1	22	12	*
> 20 years of service	16	54	0	19	11	
Staff						
≤ 20 years of service	10	38	1	26	25	NS
> 20 years of service	11	45	0	17	26	
Nature is resilient and readily recovers when disturbed						
Line						
≤ 20 years of service	12	53	1	29	6	***
> 20 years of service	17	63	1	14	4	
Staff						
≤ 20 years of service	8	38	2	31	22	***
> 20 years of service	15	46	2	24	14	
Humans must live in harmony with nature in order to survive						
Line						
≤ 20 years of service	73	26	0	2	0	**
> 20 years of service	62	34	0	4	0	
Staff						
≤ 20 years of service	72	26	0	2	0	**
> 20 years of service	63	30	0	5	1	
Human interference with nature often produces disastrous consequences						
Line						
≤ 20 years of service	27	41	1	25	5	NS
> 20 years of service	23	45	1	26	6	
Staff						
≤ 20 years of service	43	39	1	15	3	NS
> 20 years of service	38	42	2	15	3	
Nature's resources are vast and thus there is little likelihood that humans will exhaust them in the near future						
Line						
≤ 20 years of service	1	4	1	35	59	*
> 20 years of service	1	9	0	36	53	
Staff						
≤ 20 years of service	4	12	0	25	60	NS
> 20 years of service	4	12	1	26	58	
Society will have plenty of warning to make adjustments before any lasting harm is done to the environment						
Line						
≤ 20 years of service	3	13	0	40	44	**
> 20 years of service	3	22	1	42	32	
Staff						
≤ 20 years of service	4	15	0	30	51	NS
> 20 years of service	3	18	1	33	45	

NS = Not Significant

* $p < 0.05$
** $p < 0.01$
*** $p < 0.001$

Table 26.—*Proportion of line and staff employees who have any degree (Bachelor's, Master's and/or Doctor's) in the major fields indicated*

Percent of line who have a degree in:	
Forestry	69
Biology	14
Range science	7
Other natural resource science	18
Physical science or engineering	6
Other	7
Percent of staff who have a degree in:	
Forestry	21
Biology	9
Other natural resource science	10
Physical science or engineering	6
Social science or humanities	10
Other	6

Table 27.—*Demographic and background characteristics of Forest Service employees by hierarchical position*

	Upper line	Lower line	Upper staff	Middle staff	Lower staff
Percent who are:					
Women	7	14	19	32	64
Nonwhites	7	8	10	11	22
Percent who have:					
High school diplomas	100	100	100	98	97
Bachelor's degrees	100	100	93	56	19
Master's degrees	37	37	40	11	1
Doctor's degrees	18	18	16	1	0
Percent who are (based on most recent degree obtained):					
Foresters	59	58	34	19	3
Biologists	8	11	10	9	2
Range scientists	3	7	—	—	—
Other natural resource scientists	17	15	17	9	2
Physical scientists or engineers	7	4	12	5	1
Social scientists or in the humanities	—	—	9	8	10
Other	8	5	11	5	1
Average GS rating	15	13	13	9	5
Average years of service	26	20	19	16	10
Average age	50	46	47	42	41
Percent who plan 10 years from now to:					
Work for the Forest Service	29	52	40	59	59
Work elsewhere	5	5	10	10	11
Retire	66	41	49	29	28

Table 28.—*Demographic and background characteristics of Forest Service employees by gender*

	Men line	Women line	Men staff	Women staff
Percent who have:				
High school diplomas	100	100	98	99
Bachelor's degrees	100	99	63	41
Master's degrees	36	48	17	11
Doctor's degrees	19	11	5	1
Percent who are (based on most recent degree obtained):				
Foresters	61	39	24	9
Biologists	9	18	9	6
Range scientists	7	1	—	—
Other natural resource scientists	14	23	9	9
Physical scientists or engineers	4	5	7	2
Social scientists or in the humanities	—	—	7	12
Other	4	14	7	4
Average GS rating	13	13	10	8
Average years of service	23	13	18	10
Average age	48	39	44	40
Percent who plan 10 years from now to:				
Work for the Forest Service	42	84	50	65
Work elsewhere	5	9	7	14
Retire	52	4	40	20

Table 29.—*Demographic and background characteristics of Forest Service employees by race*

	White line	Minority line	White staff	Minority staff
Percent who have:				
High school diplomas	100	100	98	98
Bachelor's degrees	100	100	57	44
Master's degrees	38	28	16	9
Doctor's degrees	19	9	4	1
Percent who are (based on most recent degree obtained):				
Foresters	60	39	19	14
Biologists	9	16	8	3
Range scientists	6	16	—	—
Other natural resource scientists	15	21	10	1
Physical scientists or engineers	4	4	6	4
Social scientists or in the humanities	—	—	8	13
Other	6	4	5	9
Average GS rating	13	13	9	8
Average years of service	22	18	16	12
Average age	47	43	43	39
Percent who plan 10 years from now to:				
Work for the Forest Service	45	65	55	58
Work elsewhere	5	11	9	16
Retire	48	24	34	25

Table 30.—*Demographic and background characteristics of* ***line*** *employees by discipline (based on highest degree obtained)*

	Forestry	Biology	Range science	Other natural resources	Physical sciences & engineering
Percent who are:					
Women	8	22	2	19	15
Nonwhites	5	12	19	11	8
Percent who have:					
High school diplomas	100	100	100	100	100
Bachelor's degrees	100	100	100	100	100
Master's degrees	25	58	24	59	61
Doctor's degrees	10	41	11	30	21
Average GS rating	13	14	13	13	14
Average years of service	23	19	22	19	19
Average age	47	46	46	46	46
Percent who plan 10 years from now to:					
Work for the Forest Service	44	49	47	55	50
Work elsewhere	4	11	5	2	16
Retire	51	38	46	38	32

Table 31.—*Demographic and background characteristics of* ***staff*** *employees by discipline (based on highest degree obtained)*

	Forestry	Biology	Other natural resources	Physical sciences & engineering	Social sciences & humanities	No degree
Percent who are:						
Women	18	27	36	14	49	48
Nonwhites	10	5	1	9	19	17
Percent who have:						
High school diplomas	100	100	100	100	100	96
Bachelor's degrees	100	100	100	100	100	0
Master's degrees	21	35	39	23	21	0
Doctor's degrees	5	9	16	3	2	0
Average GS rating	11	10	11	11	9	7
Average years of service	17	12	14	17	11	16
Average age	42	39	41	44	43	43
Percent who plan 10 years from now to:						
Work for the Forest Service	58	66	64	51	56	52
Work elsewhere	8	12	11	10	18	8
Retire	33	17	22	37	23	39

Table 32.—*Demographic and background characteristics of* ***line*** *employees by years of service*

	10 years or less	20 years or less, but more than 10	30 years or less, but more than 20	More than 30 years
Percent who are:				
Women	45	22	1	0
Nonwhites	2	13	6	1
Percent who have:				
High school diplomas	100	100	100	100
Bachelor's degrees	100	100	100	100
Master's degrees	69	41	29	37
Doctor's degrees	62	12	15	24
Percent who are (based on most recent degree obtained):				
Foresters	32	51	67	67
Biologists	21	12	6	9
Range scientists	2	7	7	5
Other natural resource scientists	19	20	12	10
Physical scientists or engineers	10	5	3	4
Other	15	5	4	5
Average GS rating	13	13	13	14
Average age	41	41	50	56
Percent who plan 10 years from now to:				
Work for the Forest Service	73	82	21	1
Work elsewhere	10	8	3	2
Retire	12	8	75	97

Table 33.—*Demographic and background characteristics of* ***staff*** *employees by years of service*

	10 years or less	20 years or less, but more than 10	30 years or less, but more than 20	More than 30 years
Percent who are:				
Women	63	34	13	0
Nonwhites	20	13	8	5
Percent who have:				
High school diplomas	100	99	97	86
Bachelor's degrees	56	57	49	59
Master's degrees	16	13	16	14
Doctor's degrees	2	3	5	7
Percent who are (based on most recent degree obtained):				
Foresters	12	21	21	33
Biologists	11	9	3	5
Other natural resource scientists	10	10	7	4
Physical scientists or engineers	4	5	7	9
Social scientists or in the humanities	15	7	4	5
Other	5	5	8	2
Average GS rating	7	9	10	11
Average age	37	41	50	56
Percent who plan 10 years from now to:				
Work for the Forest Service	70	70	19	3
Work elsewhere	16	11	1	0
Retire	11	17	79	97

FIGURES

Figure 1.—Percent of Forest Service employees indicating that an RPA issue is very serious or somewhat serious, by line and staff.

Figure 2.—Percent of Forest Service employees indicating that the Agency is very committed or somewhat committed to addressing an RPA issue, by line and staff.

Figure 3.—Percent of Forest Service **line** employees indicating that the policy stated in the 1990 RPA is better (much better or somewhat better) or not different from related policies over the past 10 years.

Figure 4.—Percent of Forest Service **staff** employees indicating that the policy stated in the 1990 RPA is better (much better or somewhat better) or not different from related policies over the past 10 years.

Figure 5.—Percent of Forest Service employees indicating that further actions should be taken on an issue, by line and staff.

Figure 6.—Percent of Forest Service **line** employees indicating that the Agency's emphasis on a use has changed.

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Figure 10.—Opinions of Forest Service employees on below-cost timber sales, by line and staff.

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Figure 12.—Distribution of Forest Service employees by gender and race and by line and staff.

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Figure 15.—Percent of Forest Service employees indicating that an RPA issue is very serious, by hierarchical position.

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Figure 27.—Percent of Forest Service employees indicating that an RPA issue is very serious, by white and minority and line and staff.

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Figure 29.—Percent of Forest Service employees indicating that the policy stated in the 1990 RPA has changed over the past 10 years, by white and minority and line and staff.

Figure 30.—Percent of Forest Service employees indicating that further actions should be taken on an issue, by white and minority and line and staff.

Figure 31.—Opinions of Forest Service employees on below-cost timber sales, by white and minority and line and staff.

Figure 32.—Opinions of Forest Service employees on clearcutting, by white and minority and line and staff.

Figure 33.—Percent of Forest Service **line** employees indicating that an RPA issue is very serious, by discipline.

Figure 34.—Percent of Forest Service **staff** employees indicating that an RPA issue is very serious, by discipline.

Figure 35.—Percent of Forest Service **line** employees indicating that the Agency is very committed to addressing an RPA issue, by discipline.

Figure 36.—Percent of Forest Service **staff** employees indicating that the Agency is very committed to addressing an RPA issue, by discipline.

Figure 37.—Percent of Forest Service **line** employees indicating that the policy stated in the 1990 RPA has changed over the past 10 years, by discipline.

Figure 38.—Percent of Forest Service **staff** employees indicating that the policy stated in the 1990 RPA has changed over the past 10 years, by discipline.

Figure 39.—Percent of Forest Service **line** employees indicating that further actions should be taken on an issue, by discipline.

Figure 40.—Percent of Forest Service **staff** employees indicating that further actions should be taken on an issue, by discipline.

Figure 41.—Opinions of Forest Service **line** employees on below-cost timber sales, by discipline.

Figure 42.—Opinions of Forest Service **line** employees on clearcutting, by discipline.

Figure 43.—Opinions of Forest Service **staff** employees on below-cost timber sales, by discipline.

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Figure 45.—Percent of Forest Service **line** employees indicating that an RPA issue is very serious, by length of service.

Figure 46.—Percent of Forest Service **staff** employees indicating that an RPA issue is very serious, by length of service.

Figure 47.—Percent of Forest Service **line** employees indicating that the Agency is very committed to addressing an RPA issue, by length of service.

Figure 48.—Percent of Forest Service **staff** employees indicating that the Agency is very committed to addressing an RPA issue, by length of service.

Figure 49.—Percent of Forest Service **line** employees indicating that the policy stated in the 1990 RPA has changed over the past 10 years, by length of service.

Figure 50.—Percent of Forest Service **staff** employees indicating that the policy stated in the 1990 RPA has changed over the past 10 years, by length of service.

Figure 51.—Percent of Forest Service **line** employees indicating that further actions should be taken on an issue, by length of service.

Figure 52.—Percent of Forest Service **staff** employees indicating that further actions should be taken on an issue, by length of service.

Figure 53.—Opinions of Forest Service **line** employees on below-cost timber sales, by length of service.

Figure 54.—Opinions of Forest Service **line** employees on clearcutting, by length of service.

Figure 55.—Opinions of Forest Service **staff** employees on below-cost timber sales, by length of service.

Figure 56.—Opinions of Forest Service **staff** employees on clearcutting, by length of service.

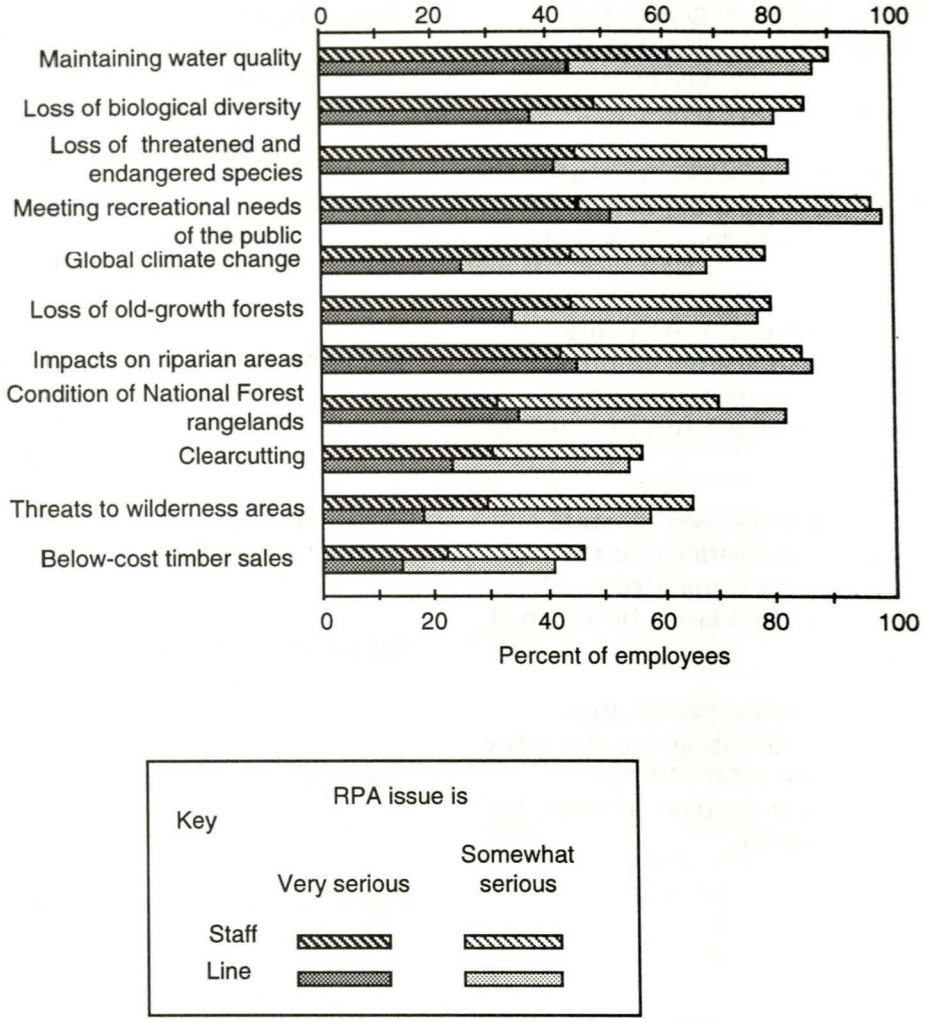
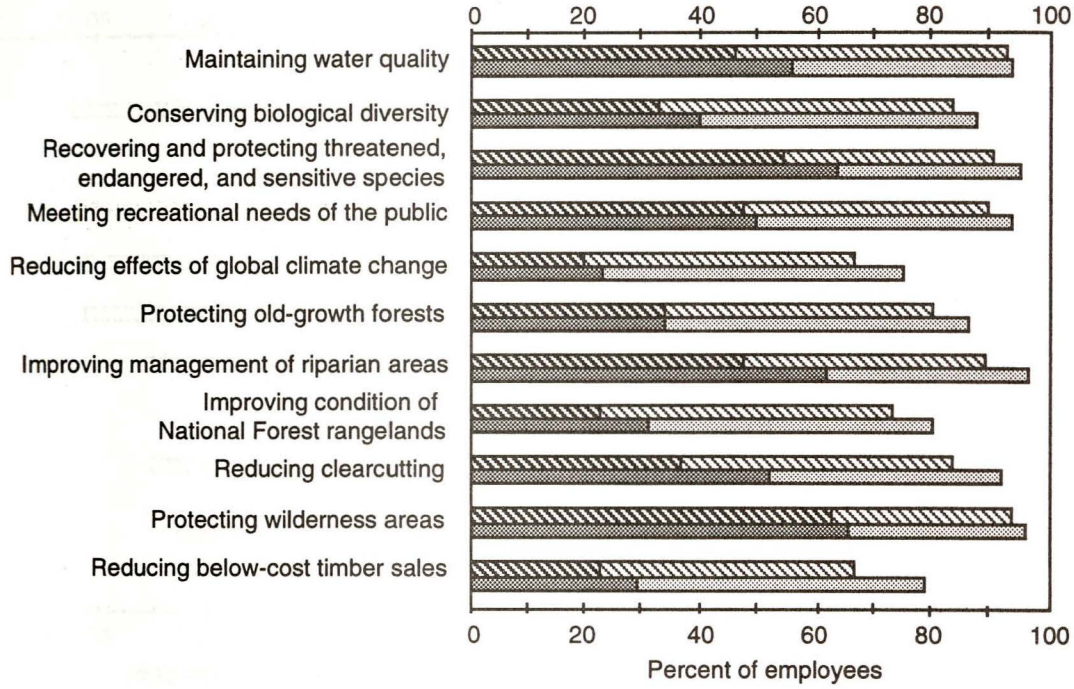


Figure 1.—*Percent of Forest Service employees indicating that an RPA issue is very serious or somewhat serious, by line and staff.*



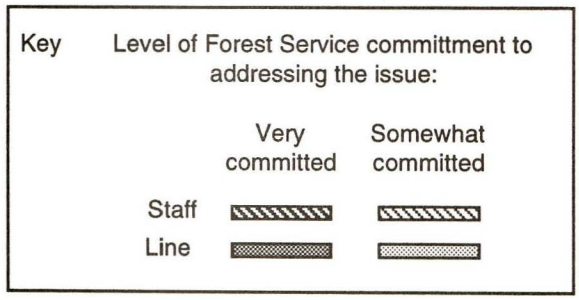
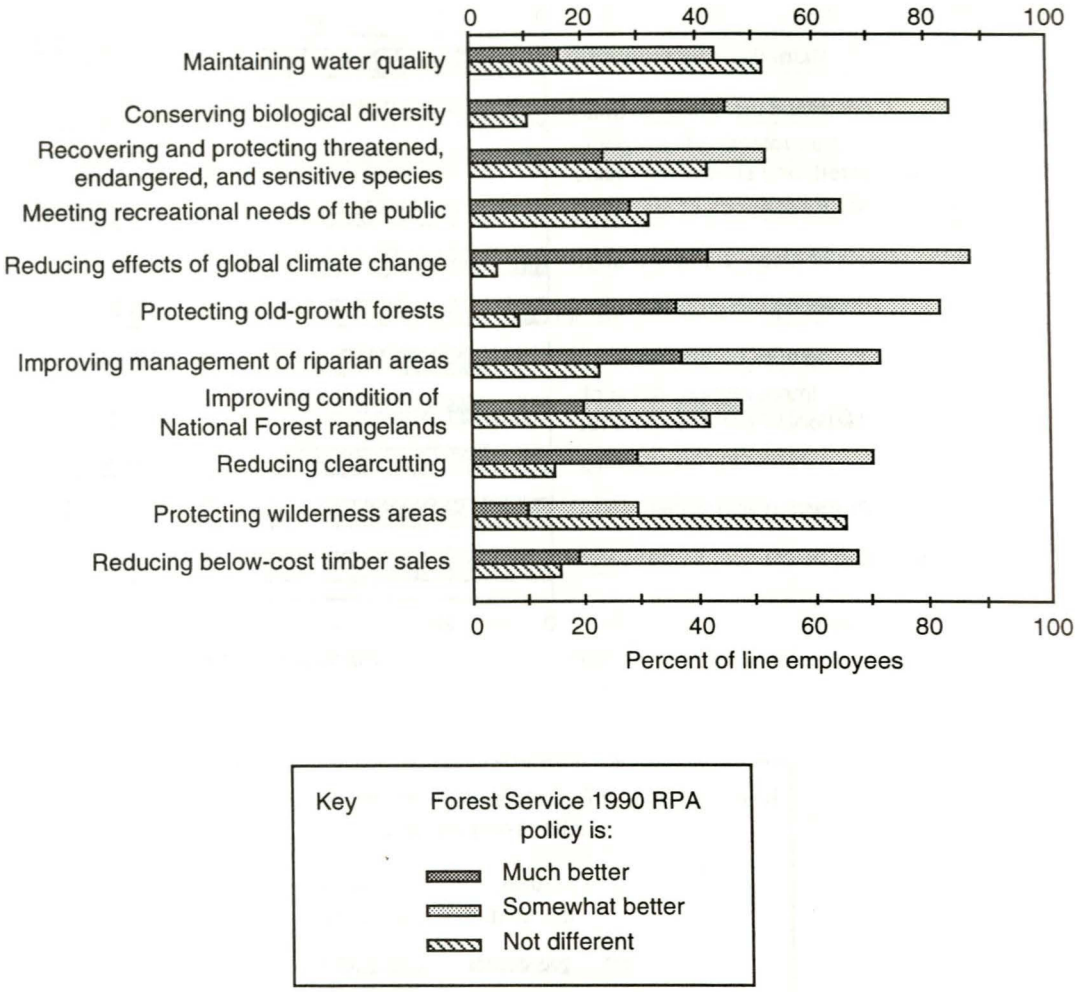


Figure 2.—*Percent of Forest Service employees indicating that the Agency is very committed or somewhat committed to addressing an RPA issue, by line and staff.*



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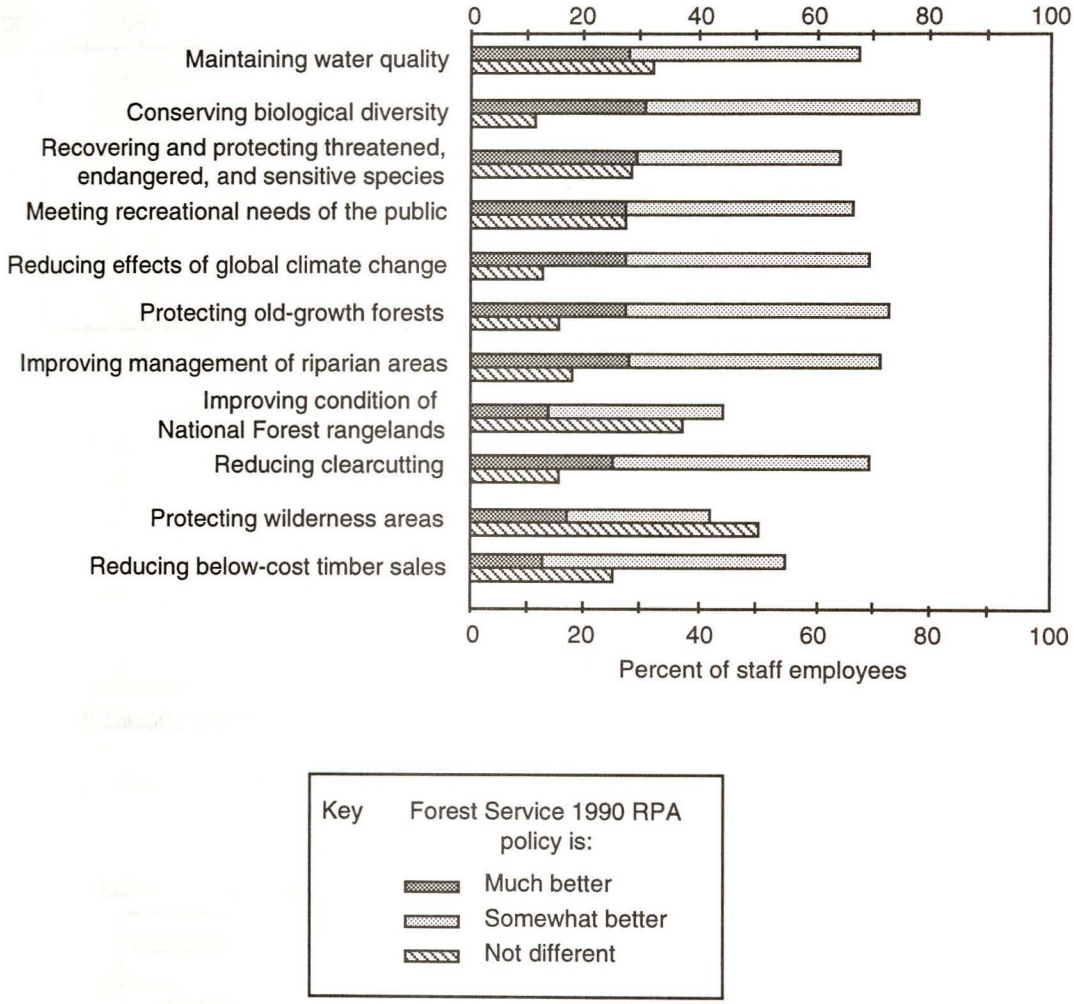


Figure 4.—*Percent of Forest Service* ***staff*** *employees indicating that the policy stated in the 1990 RPA is better (much better or somewhat better) or not different from related policies over the past 10 years.*

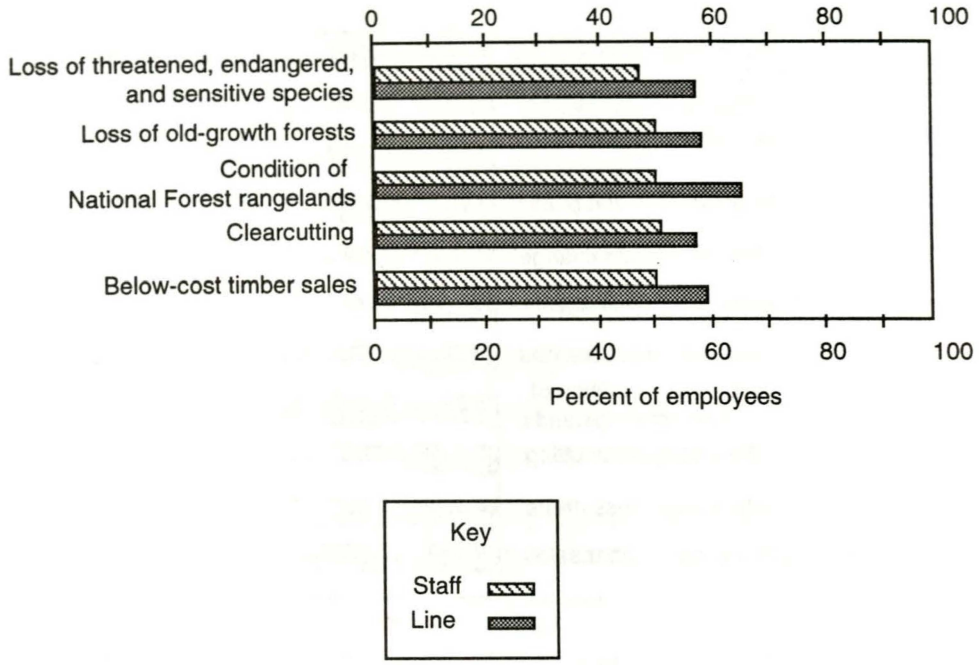


Figure 5.—*Percent of Forest Service employees indicating that further actions should be taken on an issue, by line and staff.*

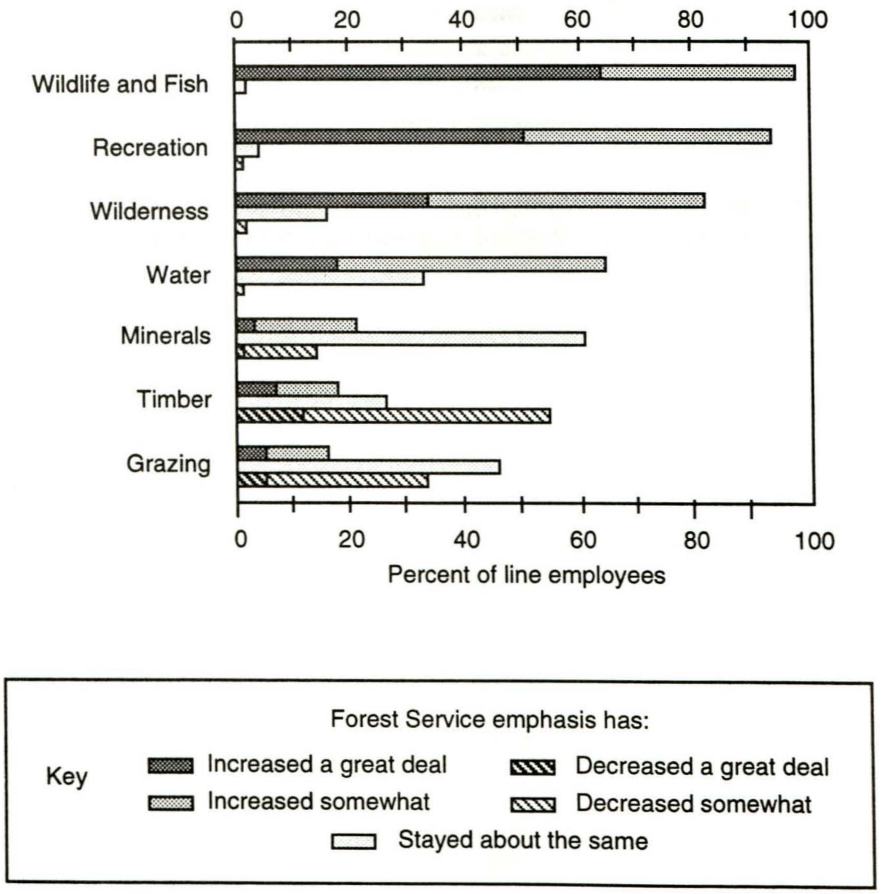


Figure 6.—*Percent of Forest Service* ***line*** *employees indicating that the Agency's emphasis on a use has changed.*

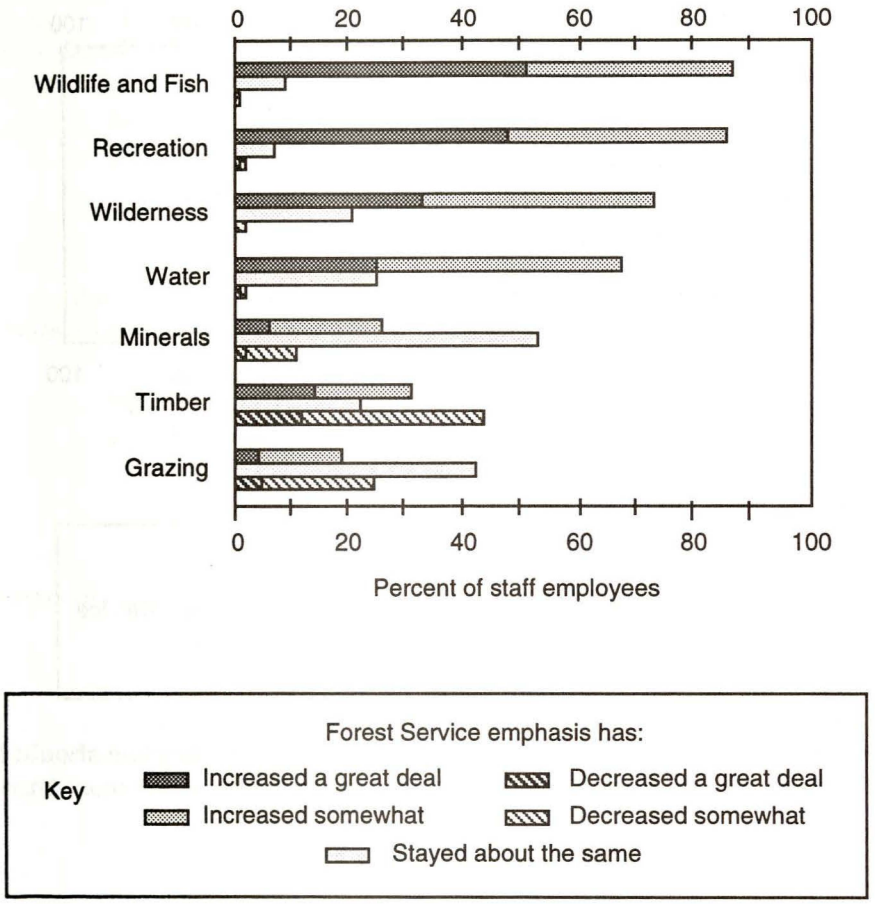


Figure 7.—*Percent of Forest Service* ***staff*** *employees indicating that the Agency's emphasis on a use has changed.*

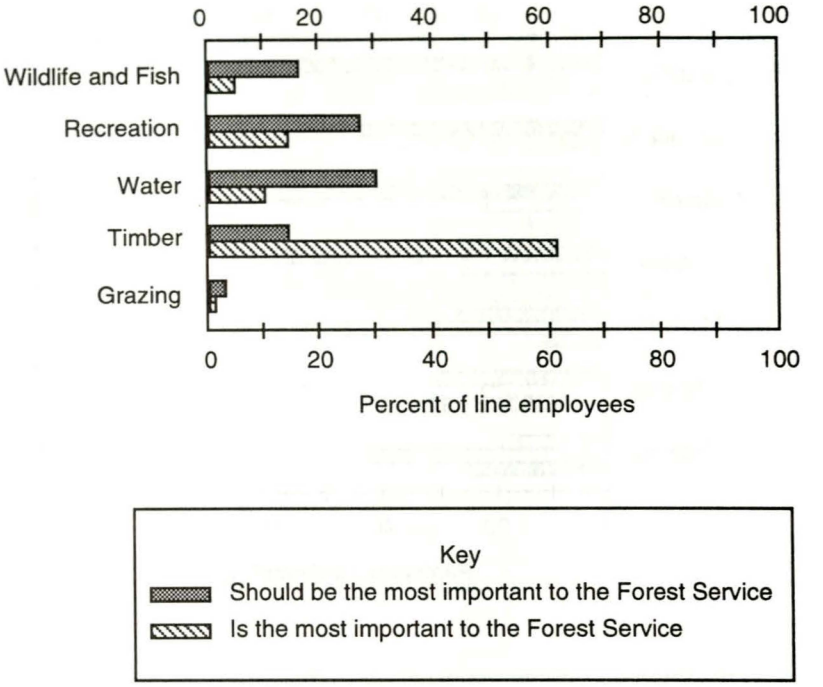


Figure 8.—*Percent of Forest Service* ***line*** *employees indicating that an objective* ***should be*** *the most important to the Agency, and the percent indicating that an objective* ***is*** *the most important to the Agency.*

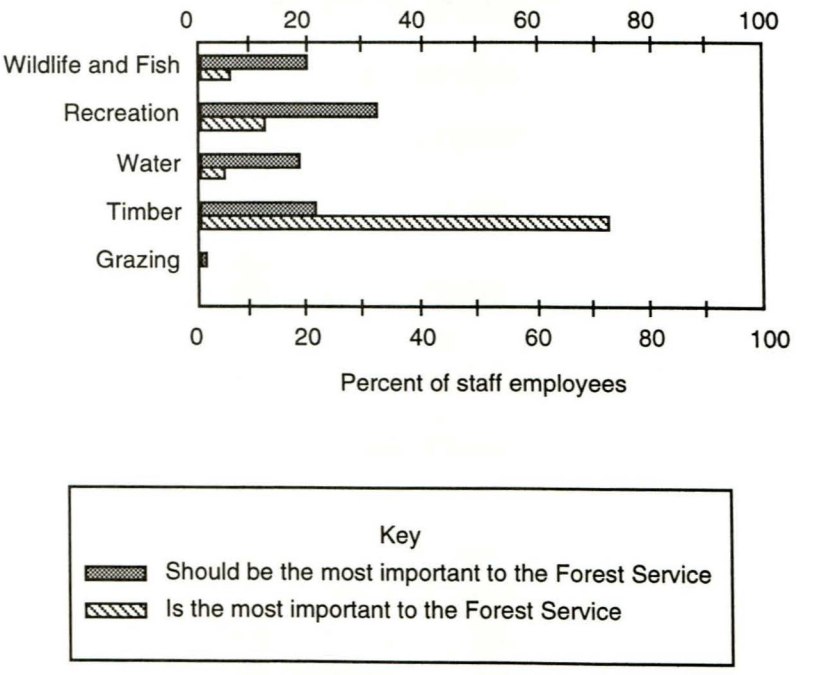


Figure 9.—*Percent of Forest Service* ***staff*** *employees indicating that an objective* ***should be*** *the most important to the Agency, and the percent indicating that an objective* ***is*** *the most important to the Agency.*

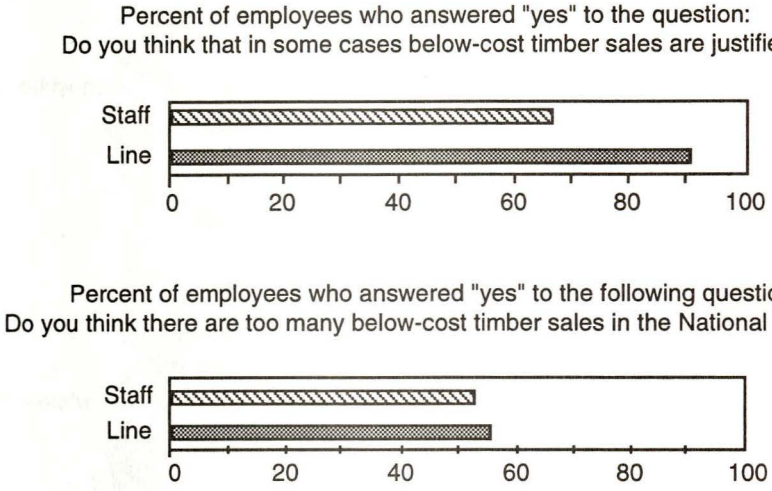


Figure 10.—*Opinions of Forest Service employees on below-cost timber sales, by line and staff.*

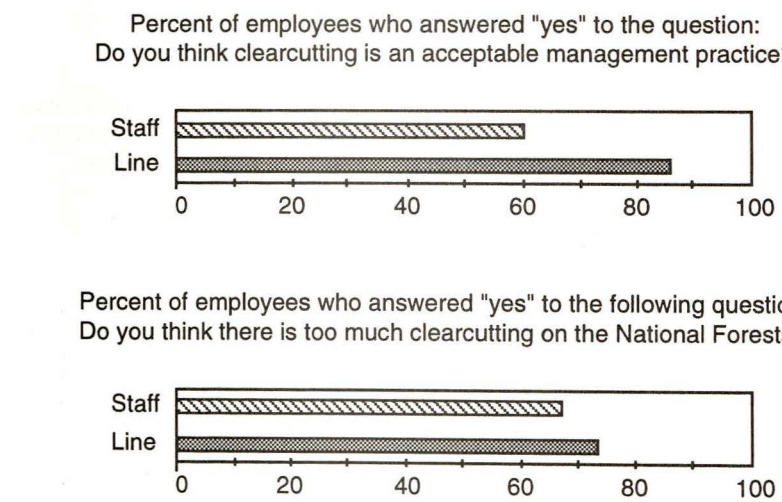


Figure 11.—*Opinions of Forest Service employees on clearcutting, by line and staff.*

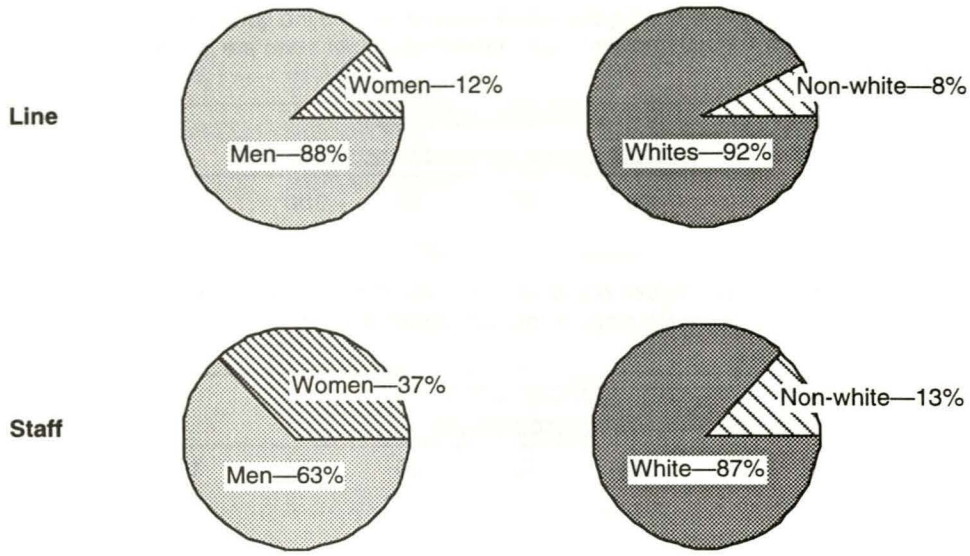


Figure 12.—*Distribution of Forest Service employees by gender and race and by line and staff.*

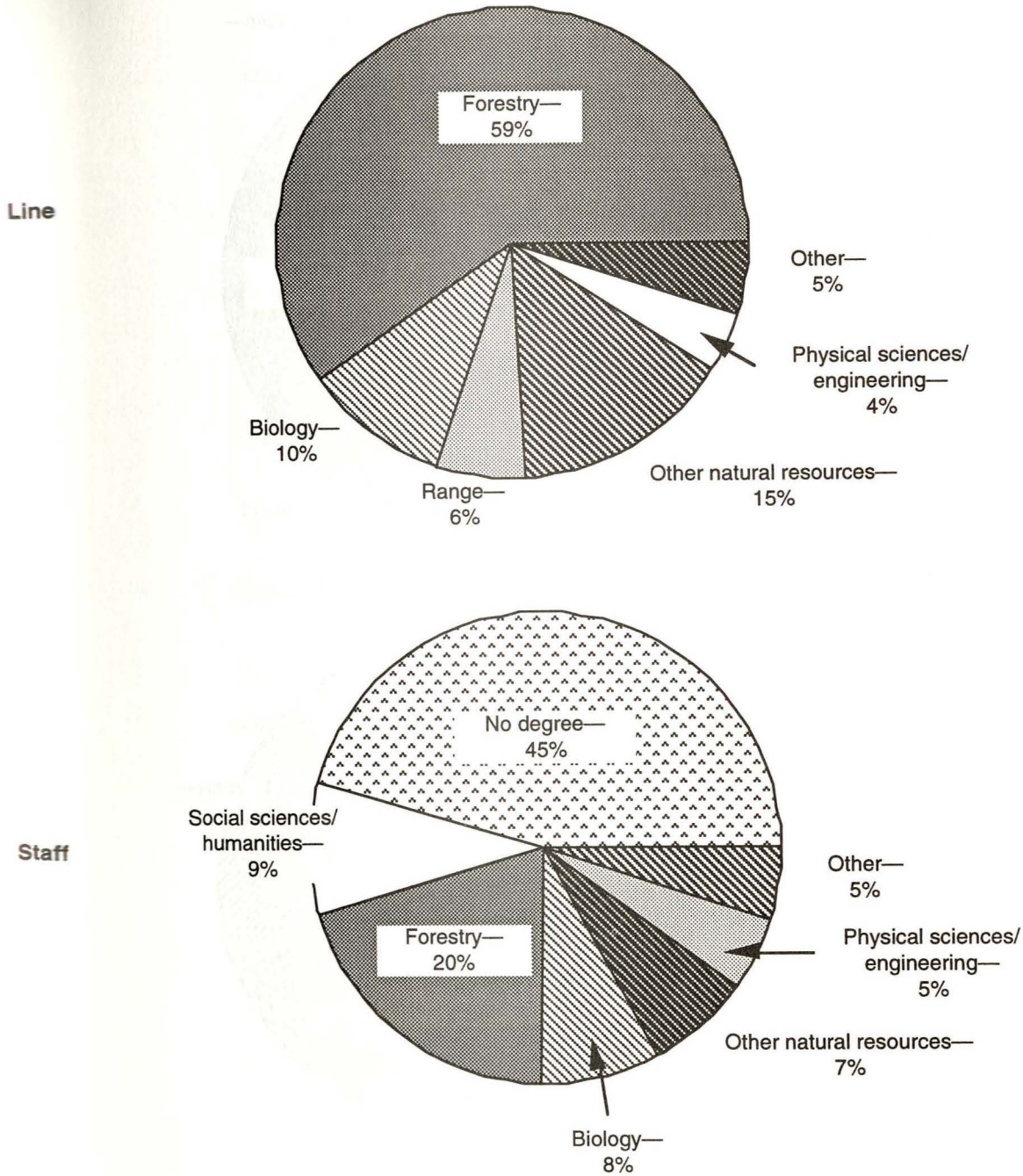


Figure 13.—*Distribution of Forest Service employees by discipline and by line and staff.*

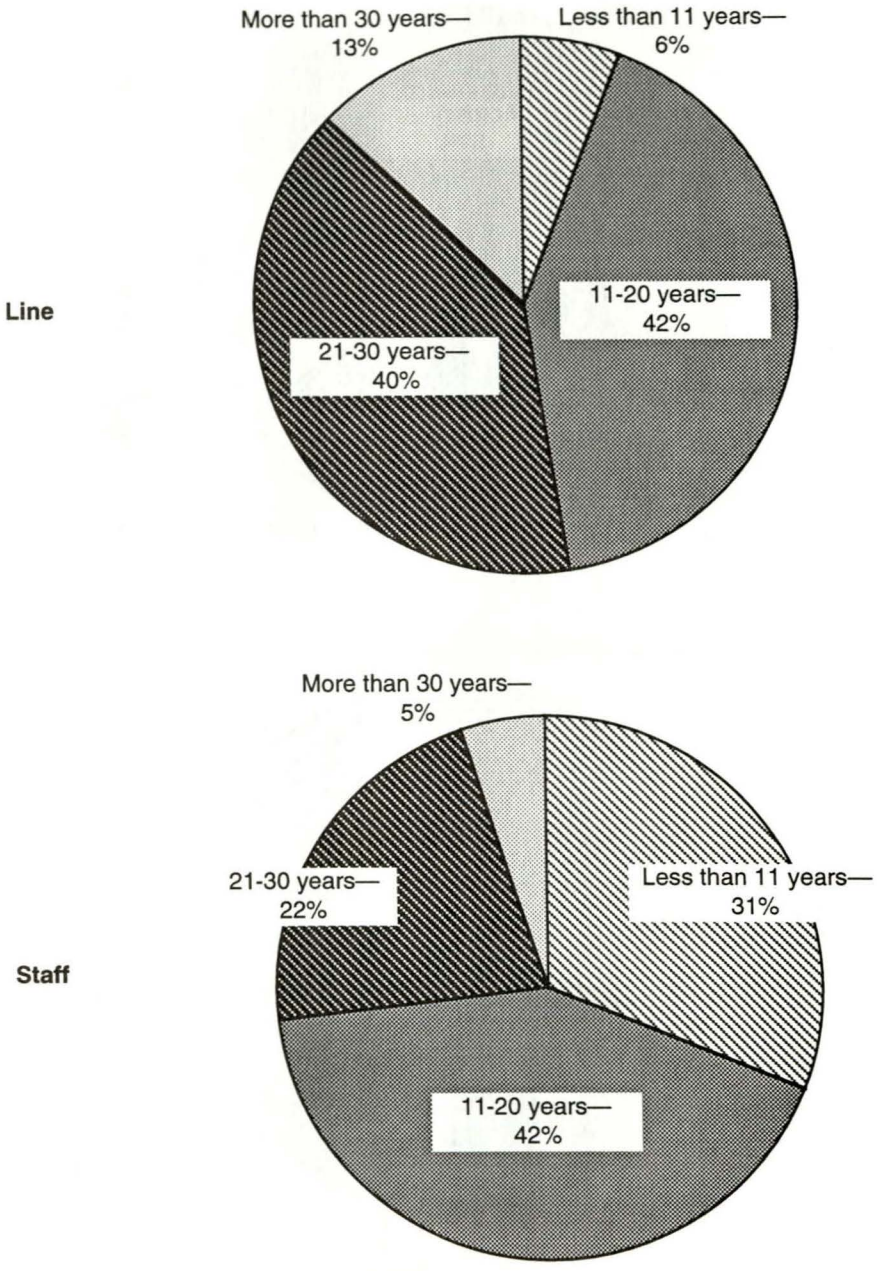


Figure 14.—*Distribution of Forest Service employees by years of service and by line and staff.*

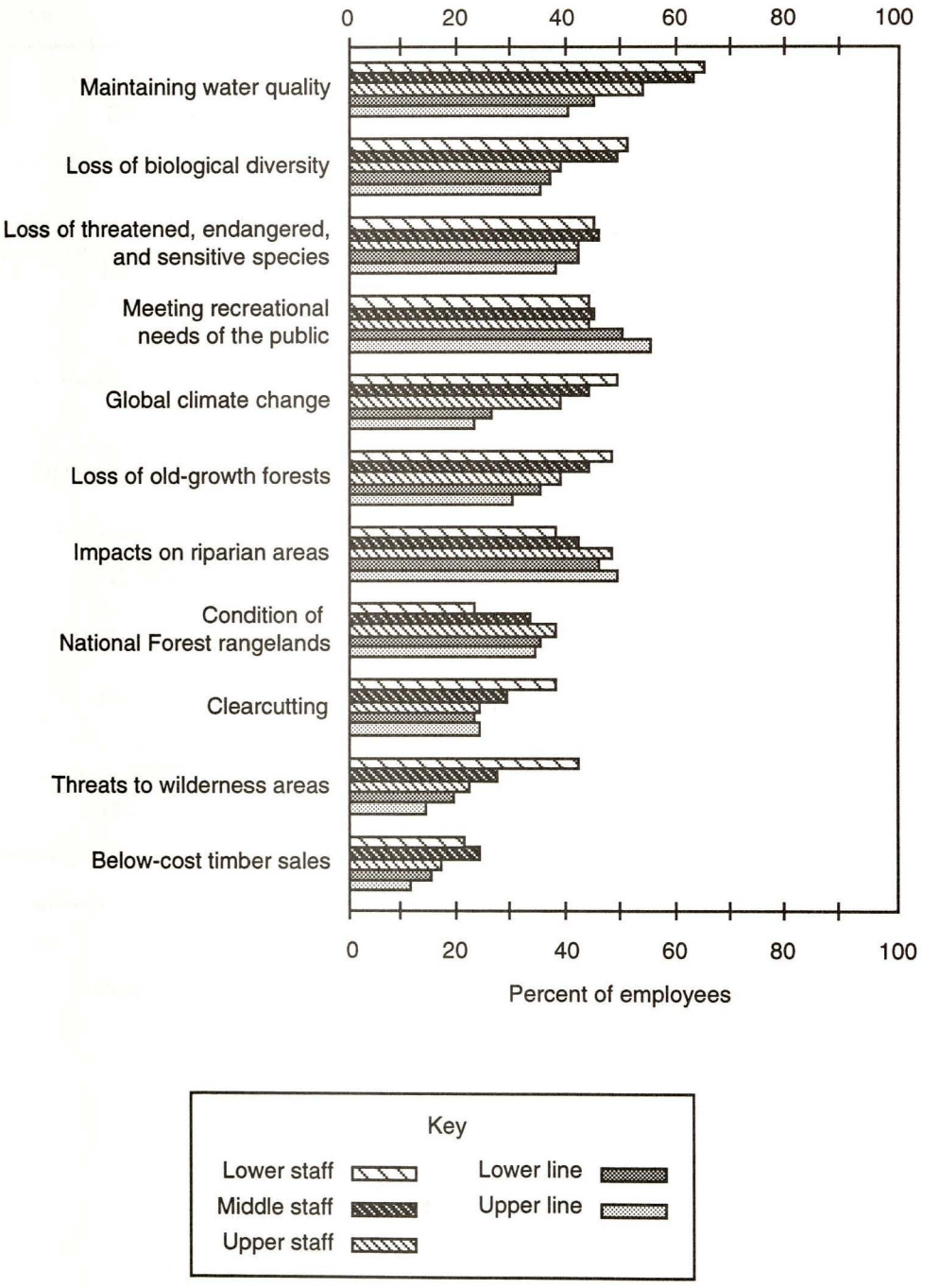


Figure 15.—*Percent of Forest Service employees indicating that an RPA issue is very serious, by hierarchical position.*

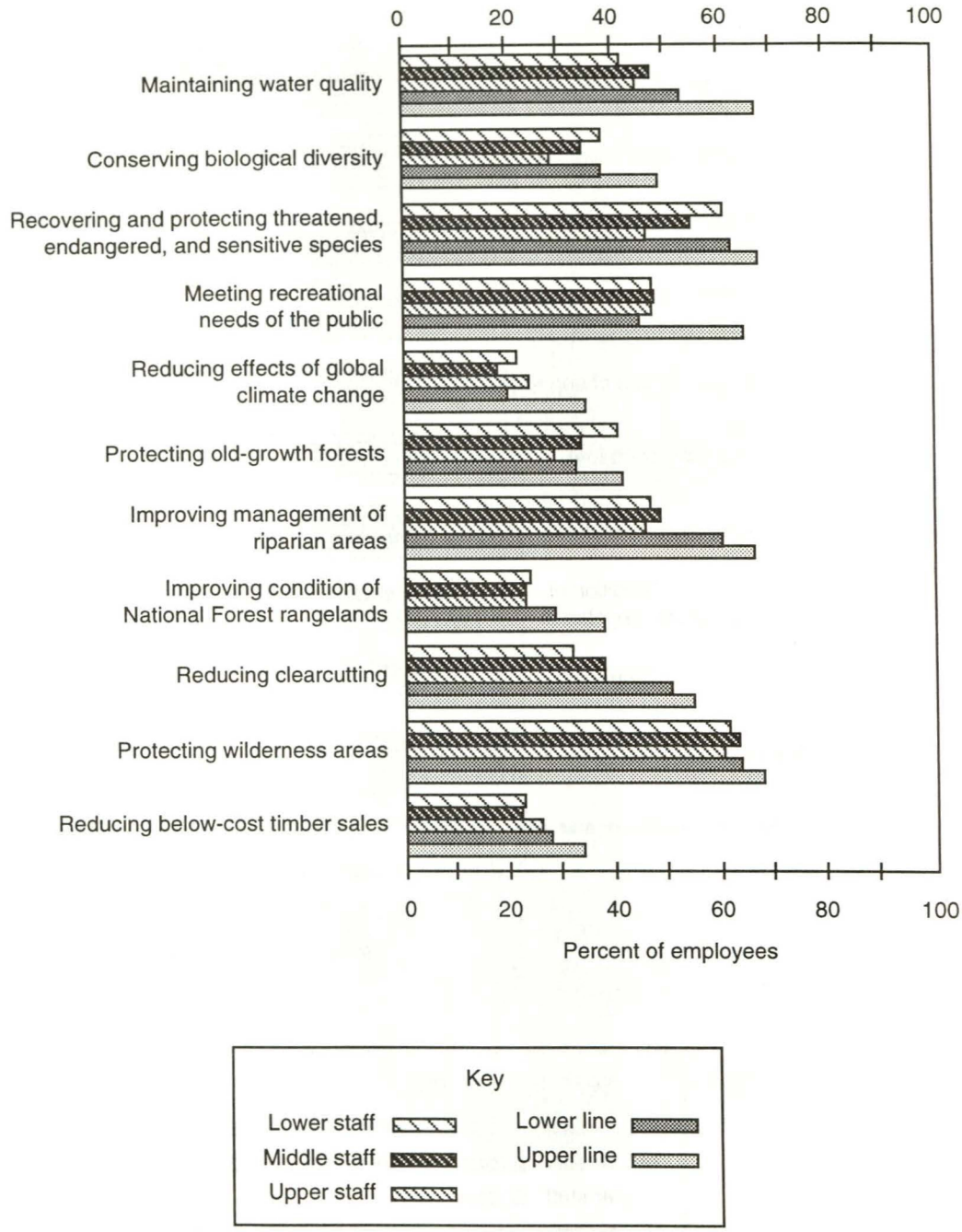


Figure 16.—*Percent of Forest Service employees indicating that the Agency is very committed to addressing an RPA issue, by hierarchical position.*

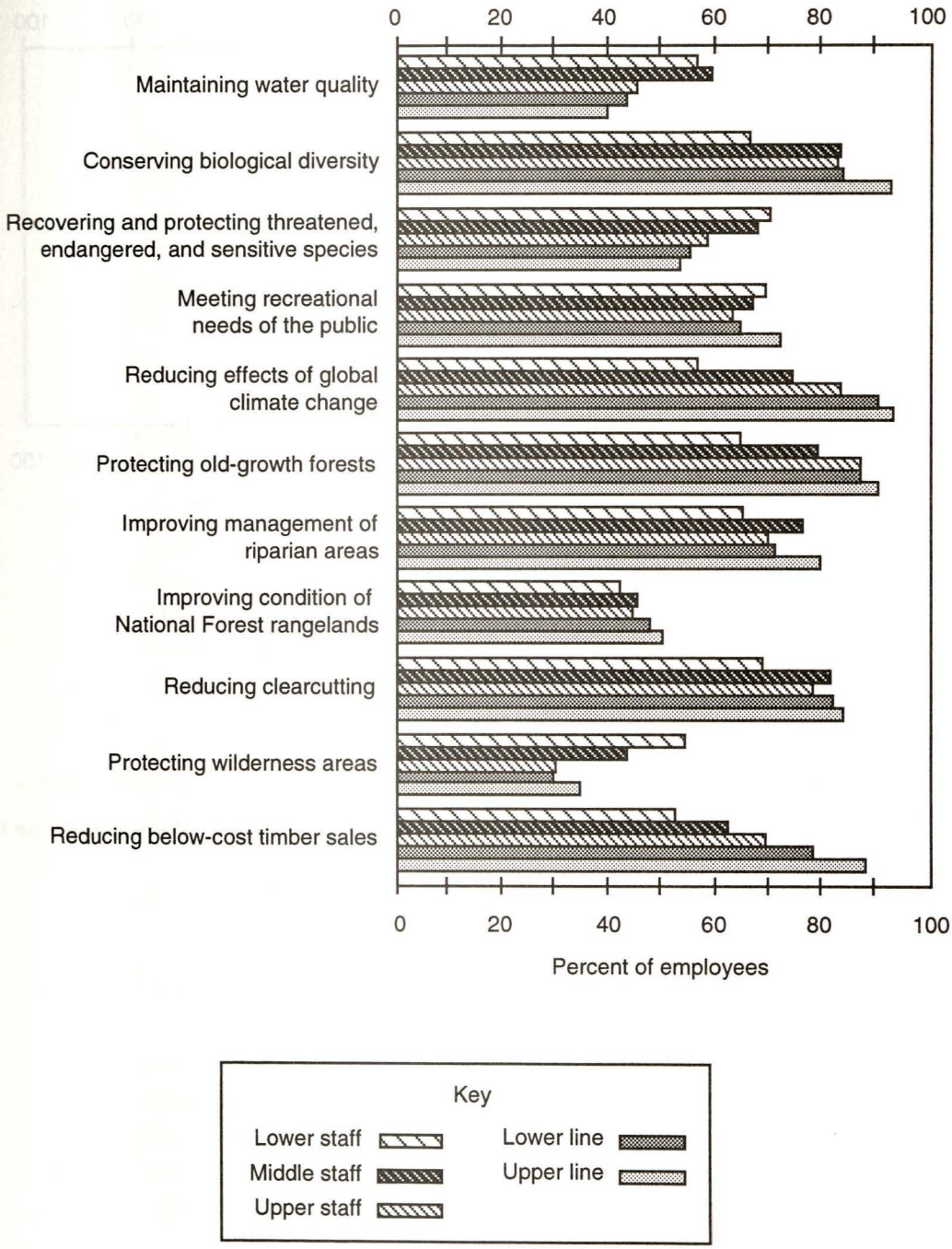


Figure 17.—*Percent of Forest Service employees indicating that the policy stated in the 1990 RPA has changed over the past 10 years, by hierarchical position.*

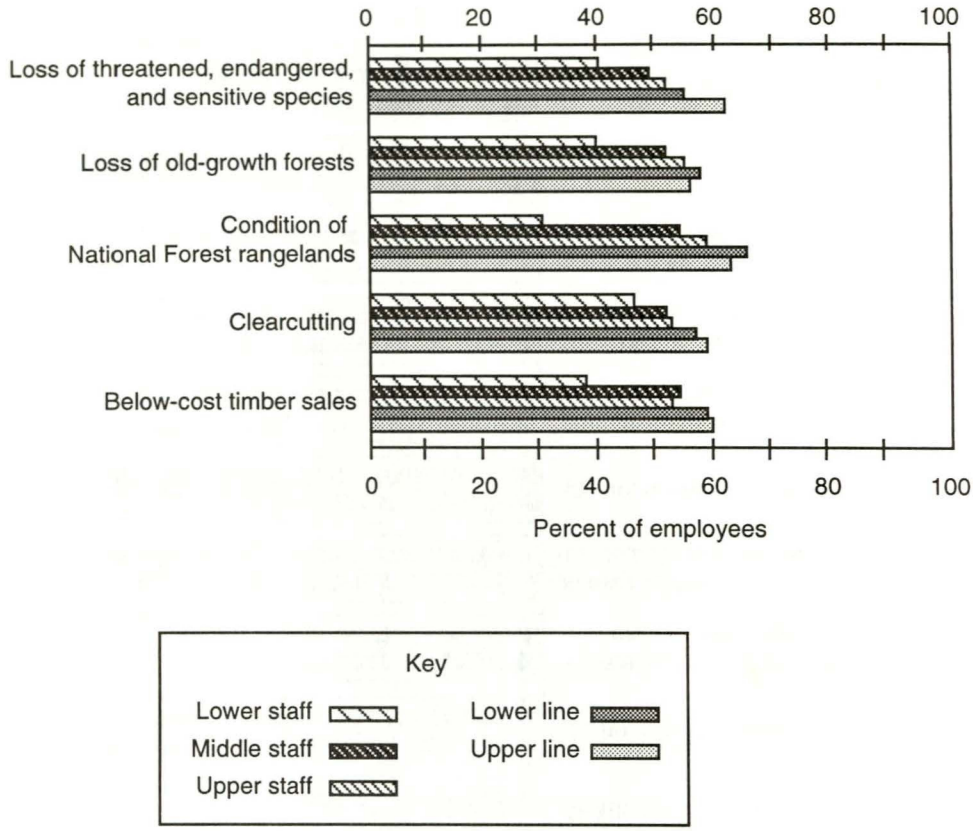


Figure 18.—*Percent of Forest Service employees indicating that further actions should be taken on an issue, by hierarchical position.*

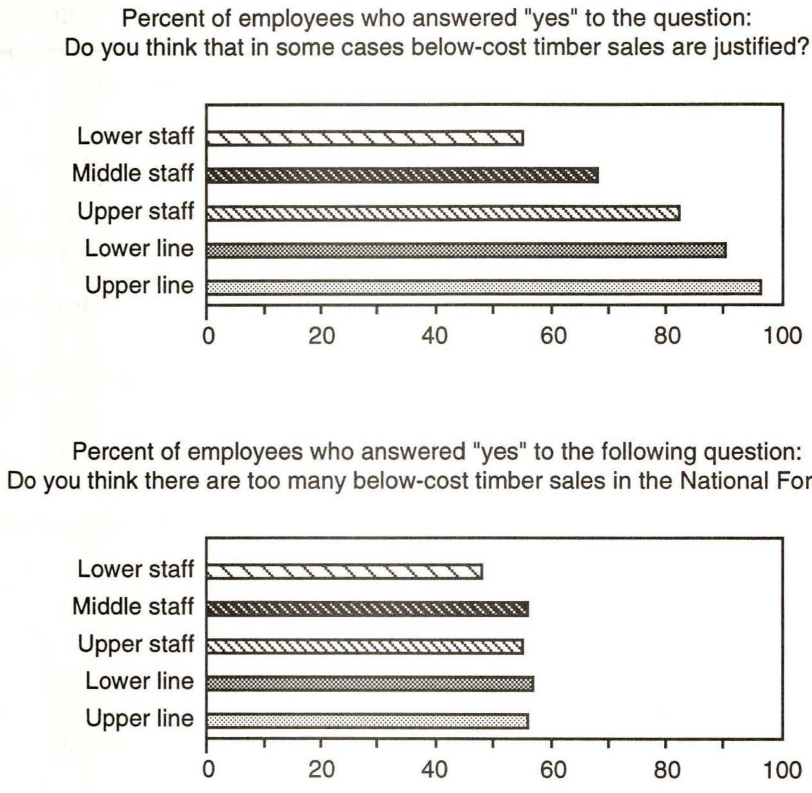


Figure 19.—*Opinions of Forest Service employees on below-cost timber sales, by hierarchical position.*

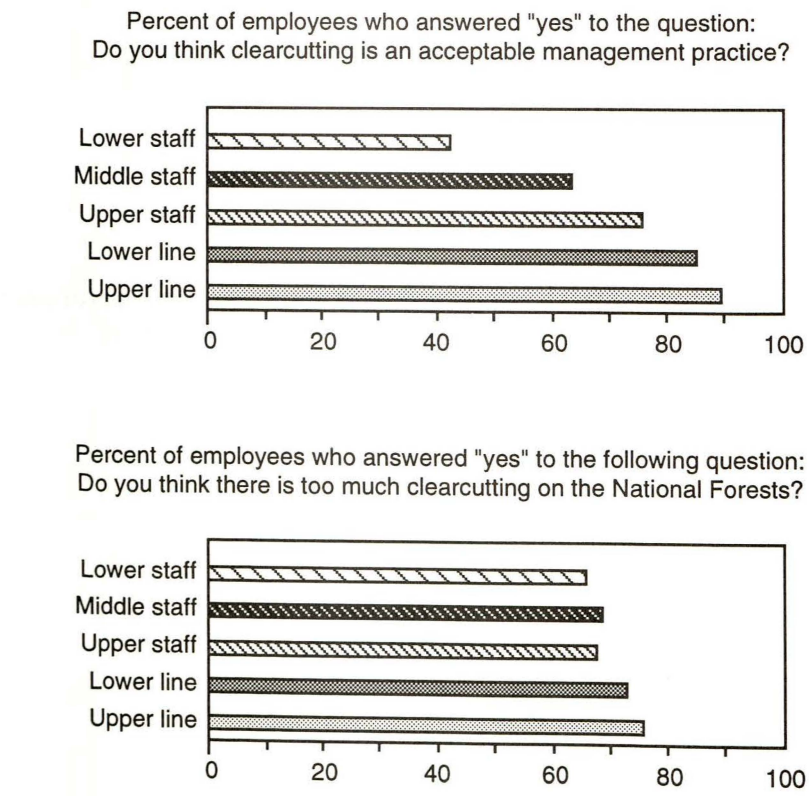


Figure 20.—*Opinions of Forest Service employees on clearcutting, by hierarchical position.*

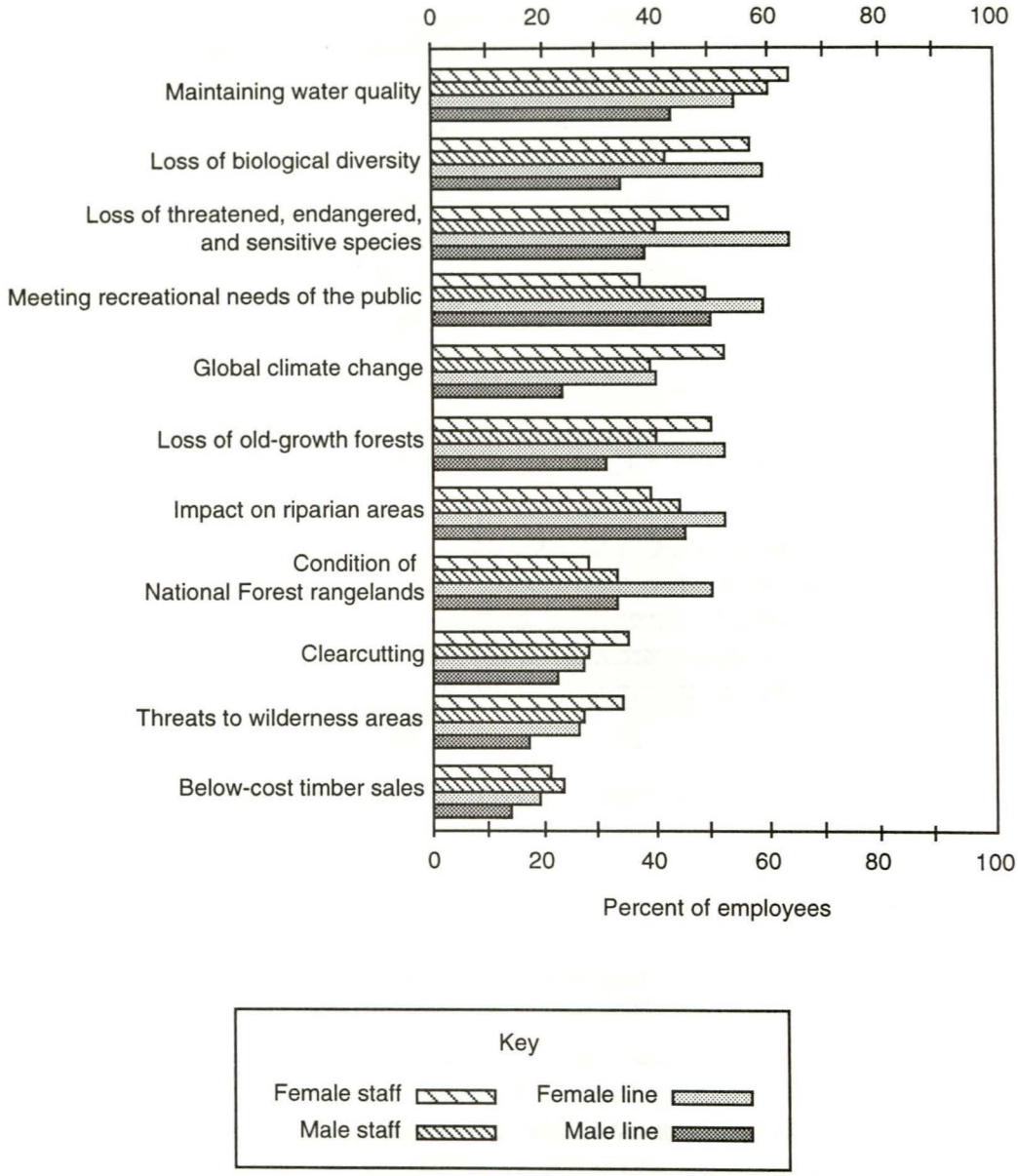


Figure 21.—*Percent of Forest Service employees indicating that an RPA issue is very serious, by gender and line and staff.*

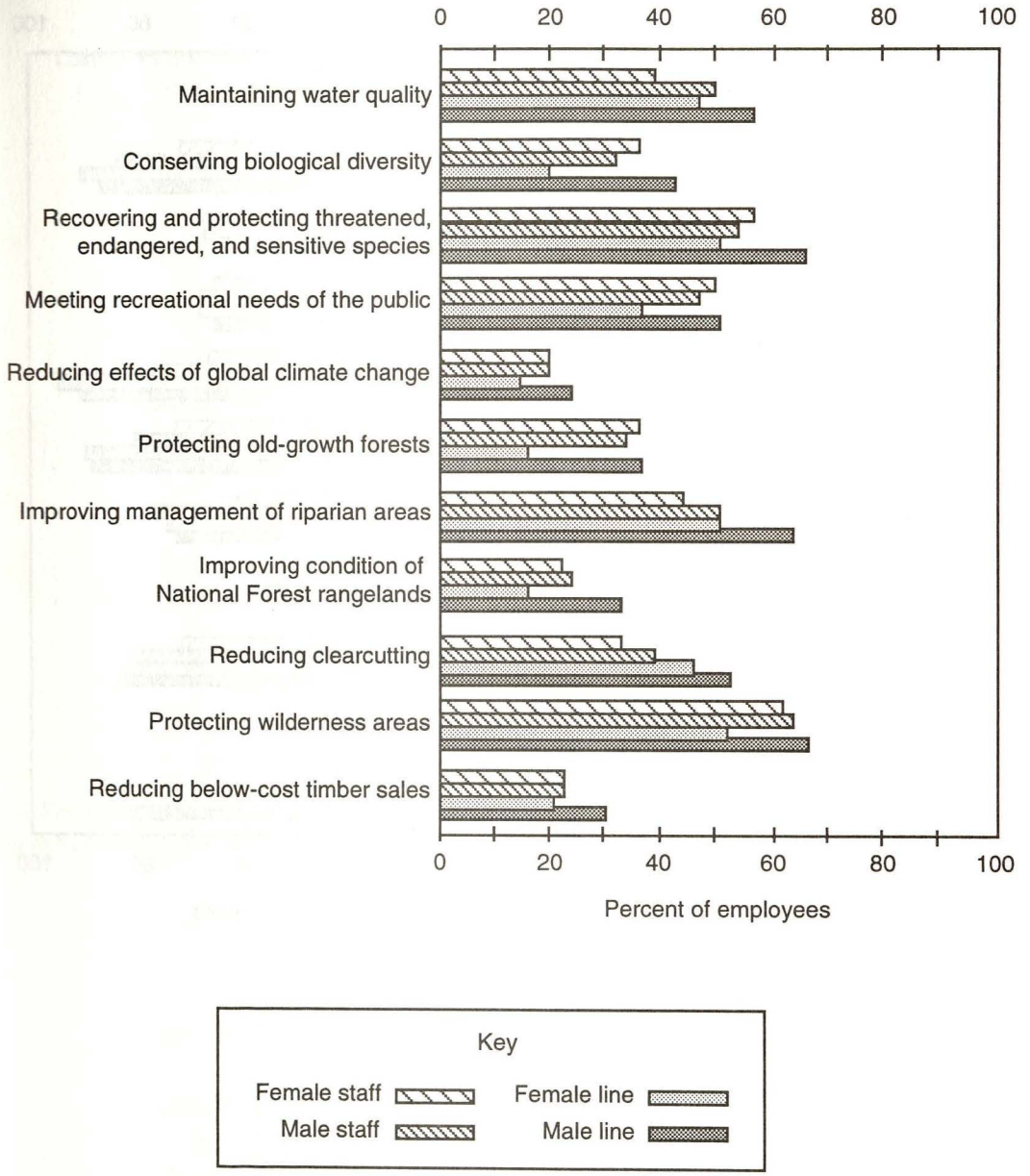


Figure 22.—*Percent of Forest Service employees indicating that the Agency is very committed to addressing an RPA issue, by gender and line and staff.*

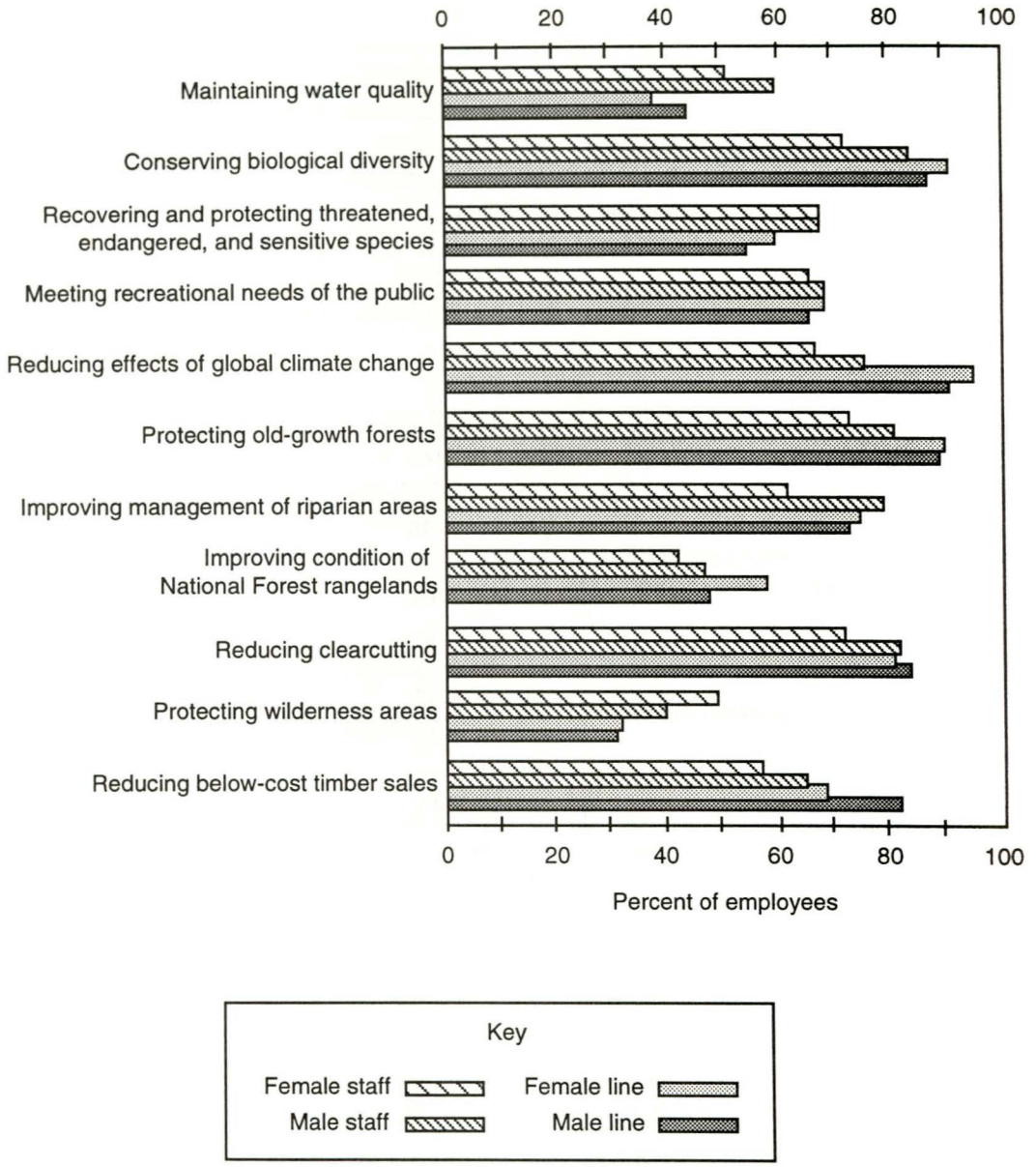


Figure 23.—*Percent of Forest Service employees indicating that the policy stated in the 1990 RPA has changed over the past 10 years, by gender and line and staff.*

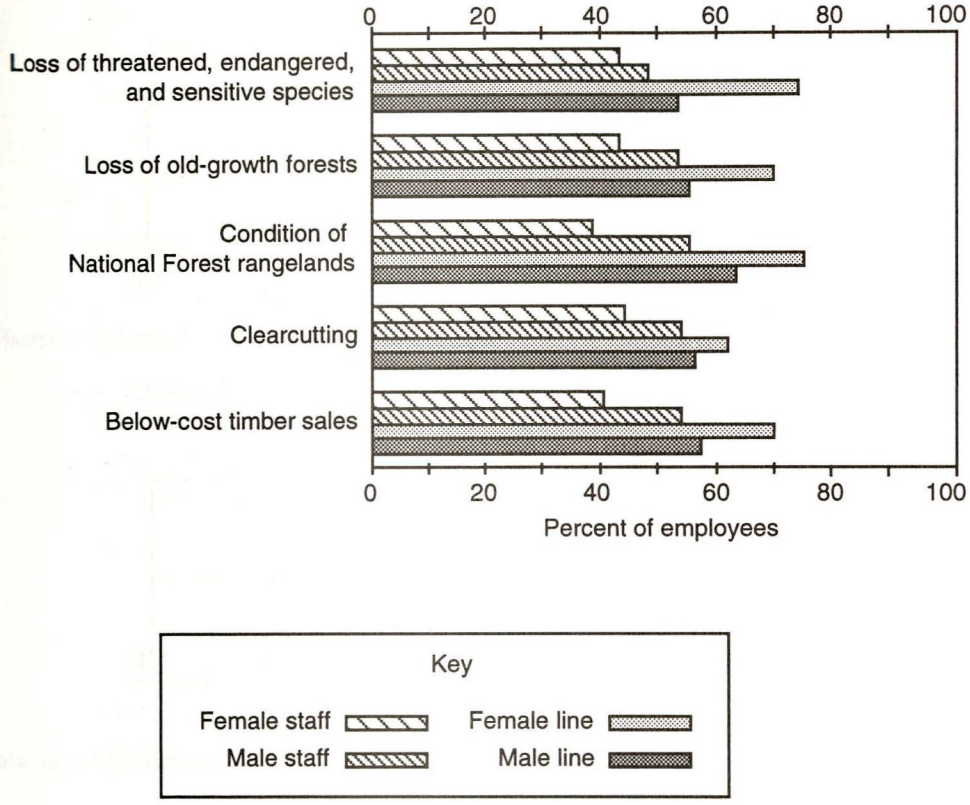


Figure 24.—*Percent of Forest Service employees indicating that further actions should be taken on an issue, by gender and line and staff.*

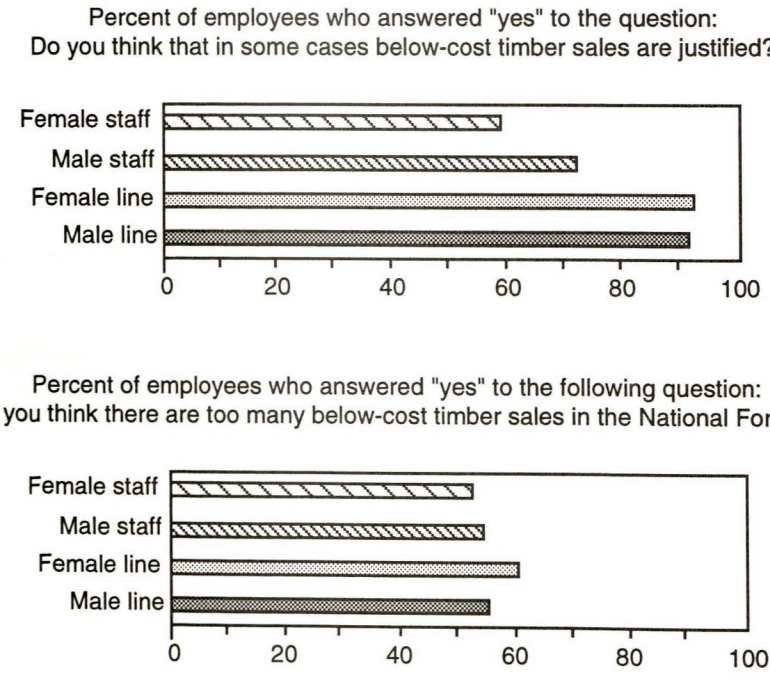


Figure 25.—*Opinions of Forest Service employees on below-cost timber sales, by gender and line and staff.*

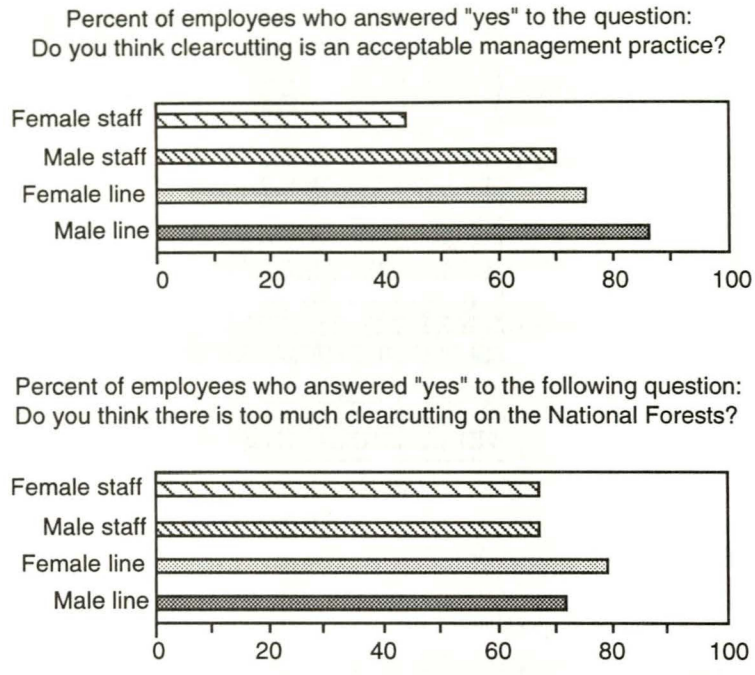


Figure 26.—*Opinions of Forest Service employees on clearcutting, by gender and line and staff.*

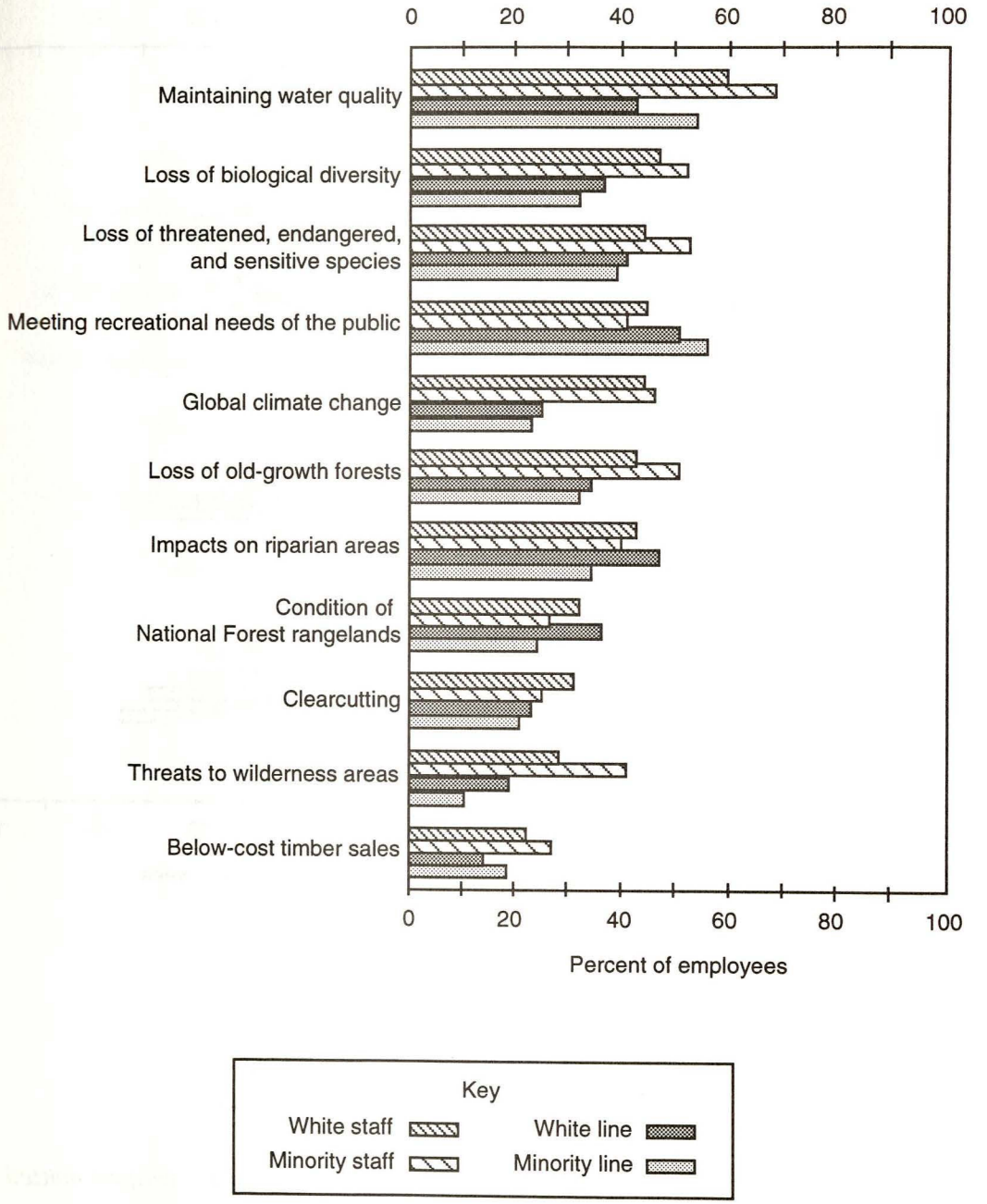


Figure 27.—*Percent of Forest Service employees indicating that an RPA issue is very serious, by white and minority and line and staff.*

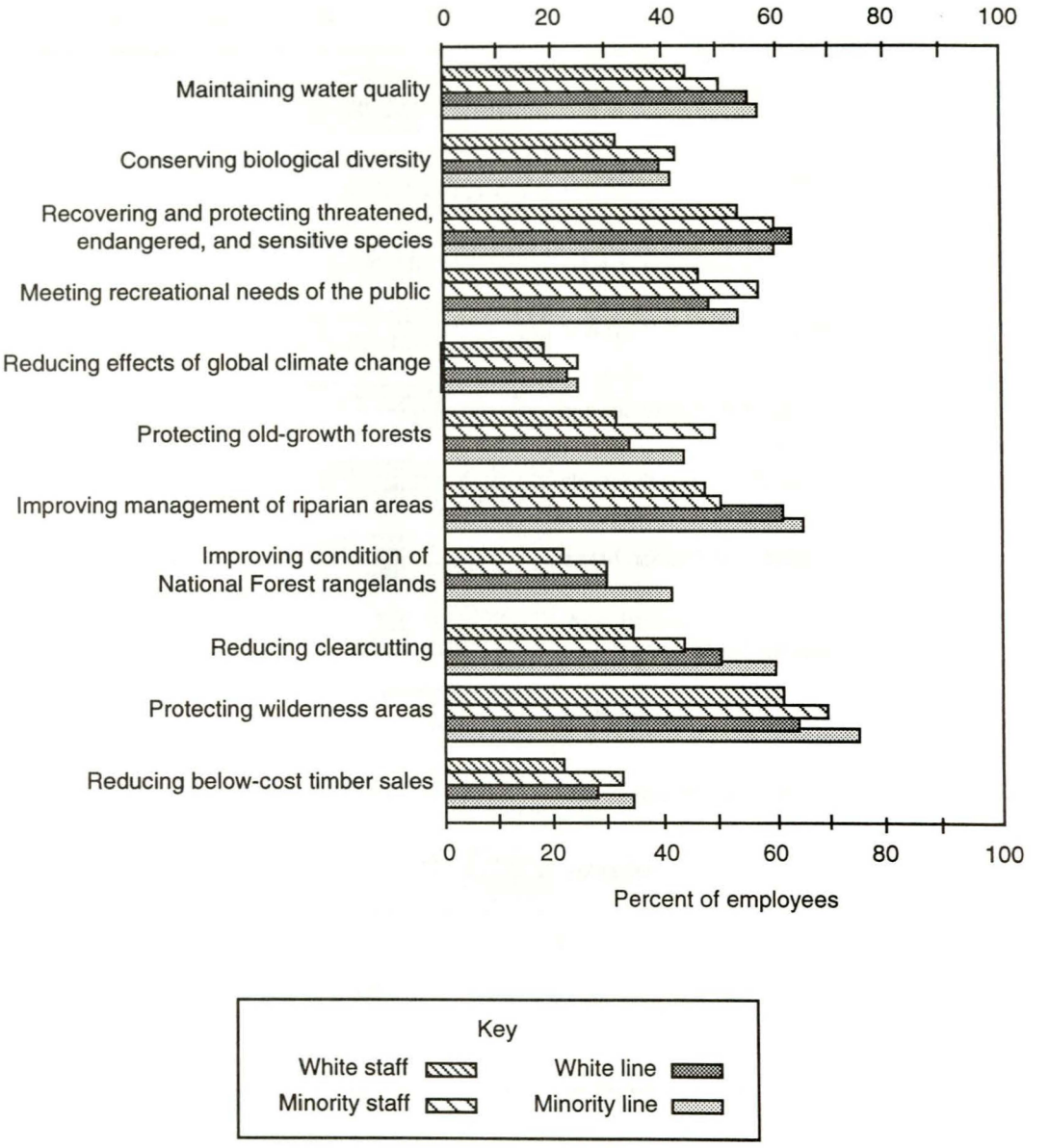


Figure 28.—*Percent of Forest Service employees indicating that the Agency is very committed to addressing an RPA issue, by white and minority and line and staff.*

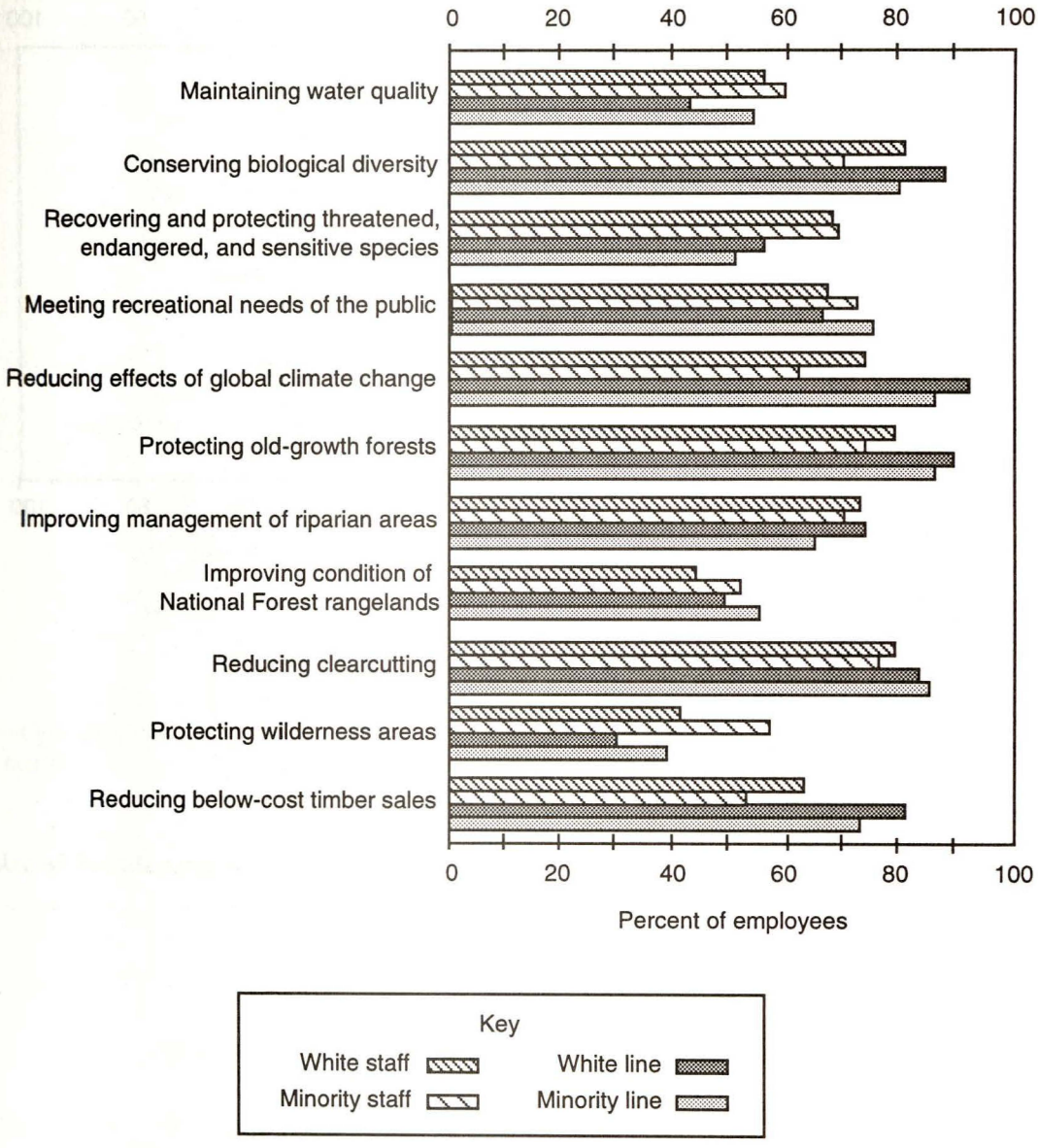


Figure 29.—*Percent of Forest Service employees indicating that the policy stated in the 1990 RPA has changed over the past 10 years, by white and minority and line and staff.*

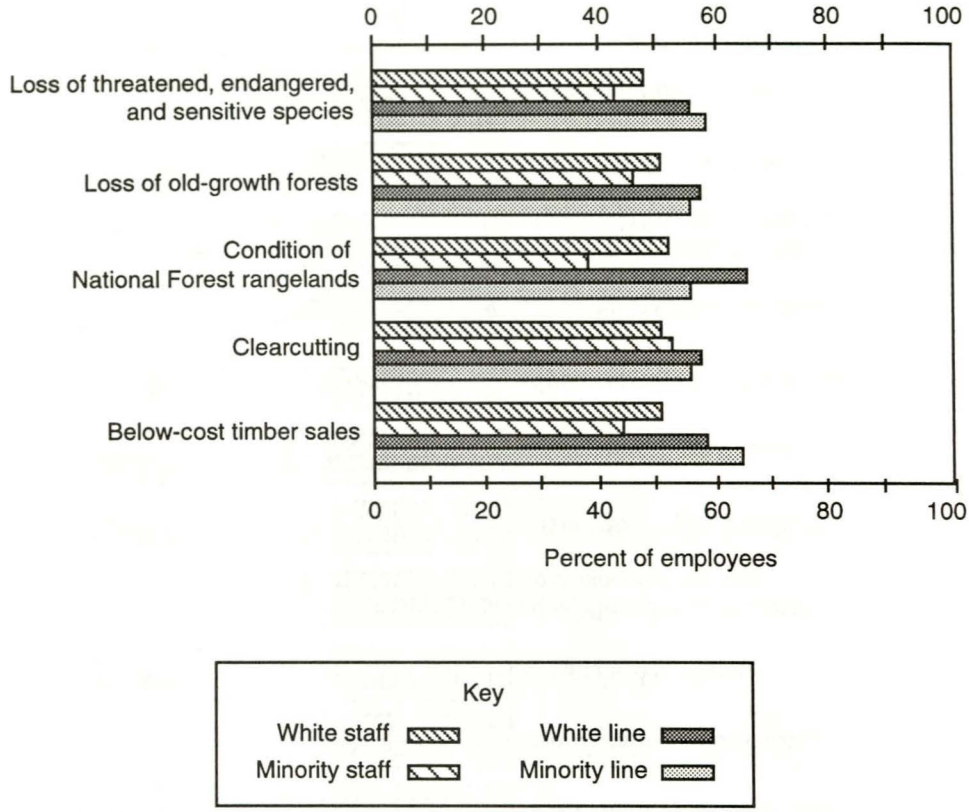


Figure 30.—*Percent of Forest Service employees indicating that further actions should be taken on an issue, by white and minority and line and staff.*

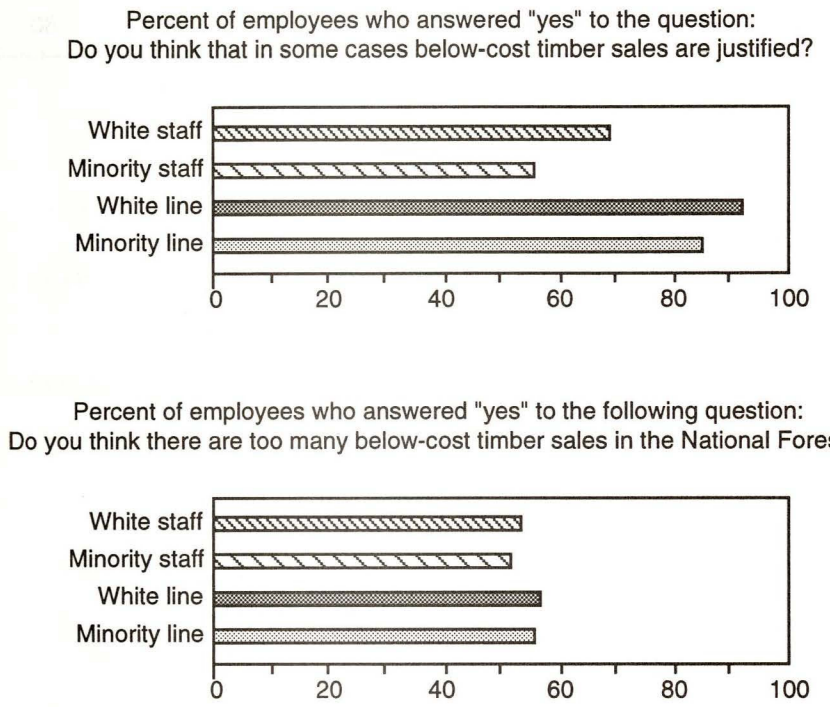


Figure 31.—*Opinions of Forest Service employees on below-cost timber sales, by white and minority and line and staff.*

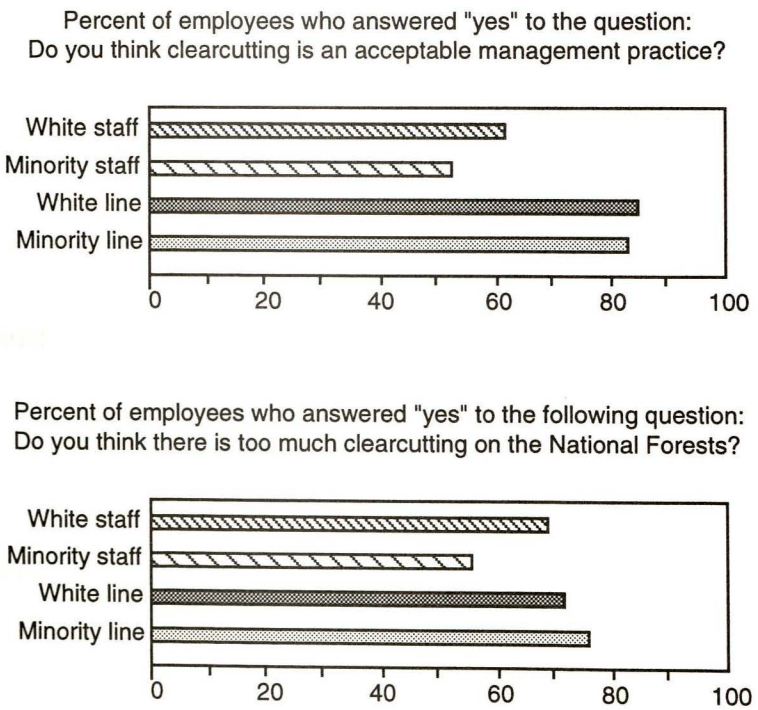


Figure 32.—*Opinions of Forest Service employees on clearcutting, by white and minority and line and staff.*

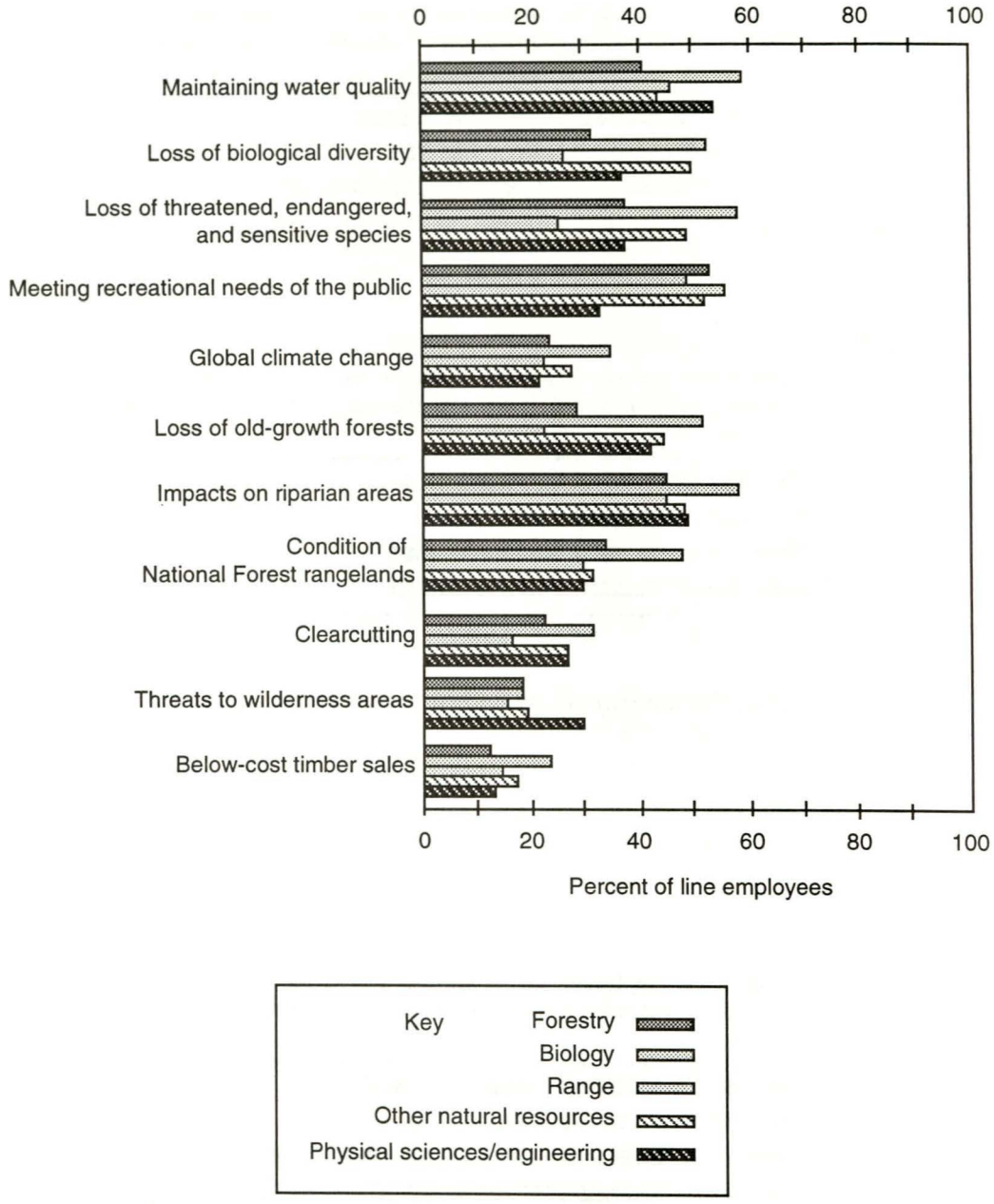


Figure 33.—*Percent of Forest Service* ***line*** *employees indicating that an RPA issue is very serious, by discipline.*

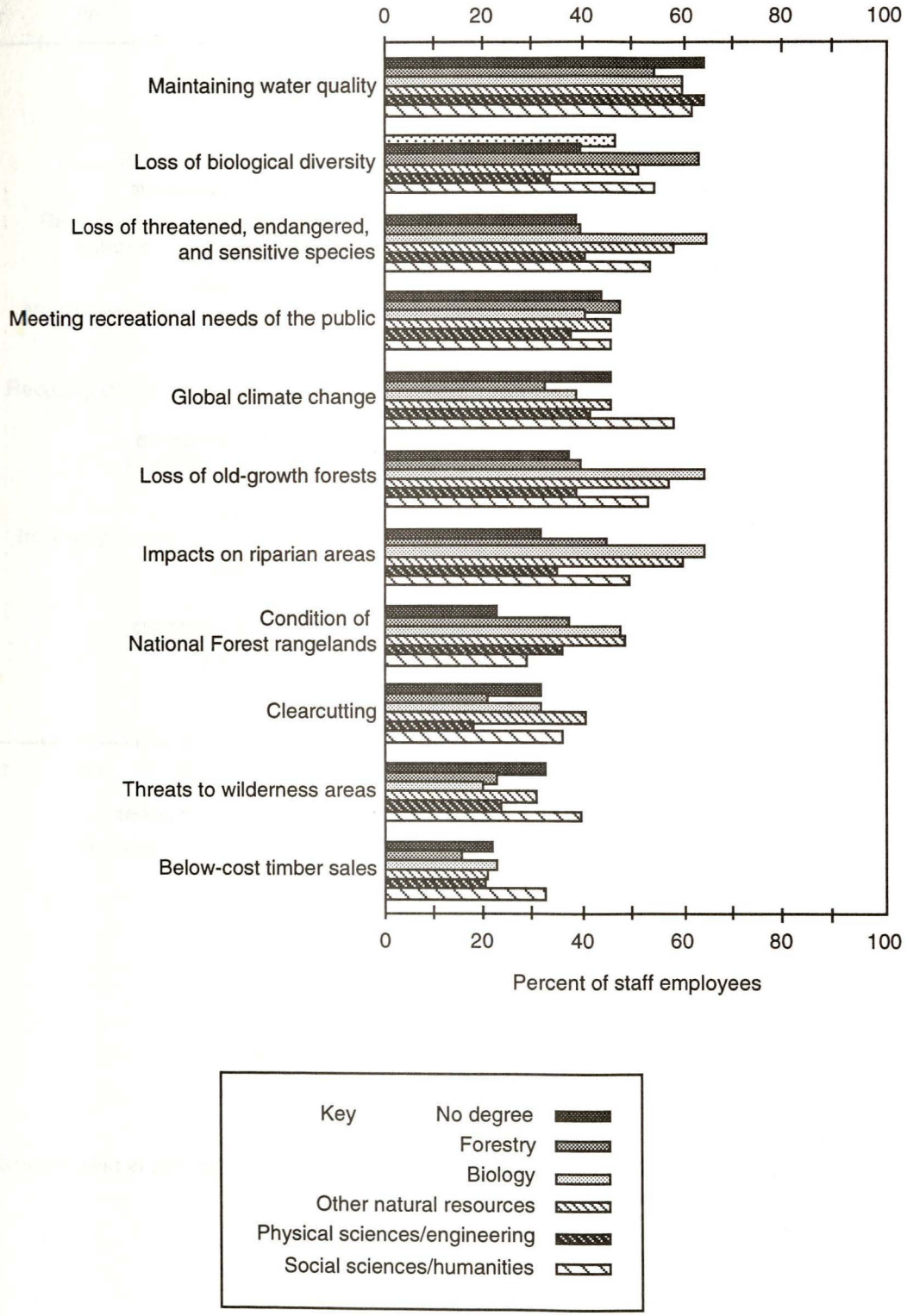


Figure 34.—*Percent of Forest Service* ***staff*** *employees indicating that an RPA issue is very serious, by discipline.*

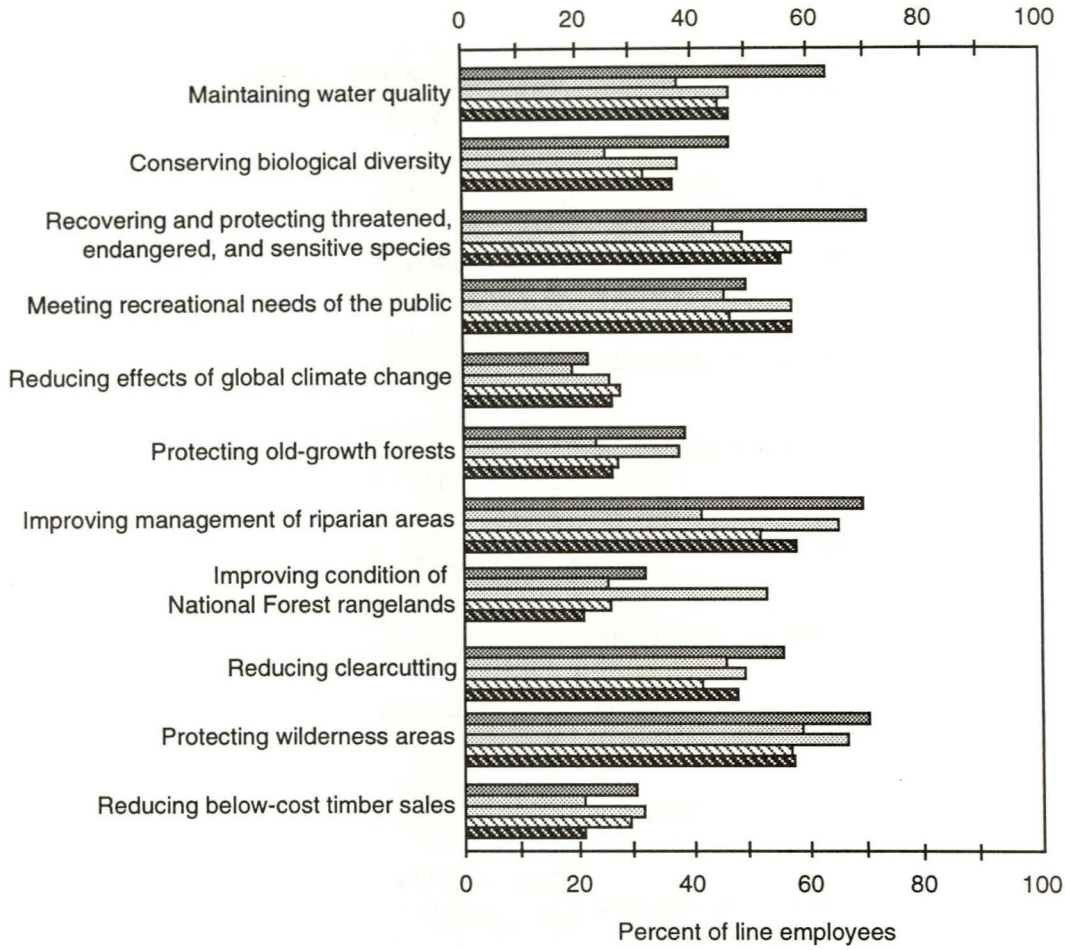


Figure 35.—*Percent of Forest Service* ***line*** *employees indicating that the Agency is very committed to addressing an RPA issue, by discipline.*

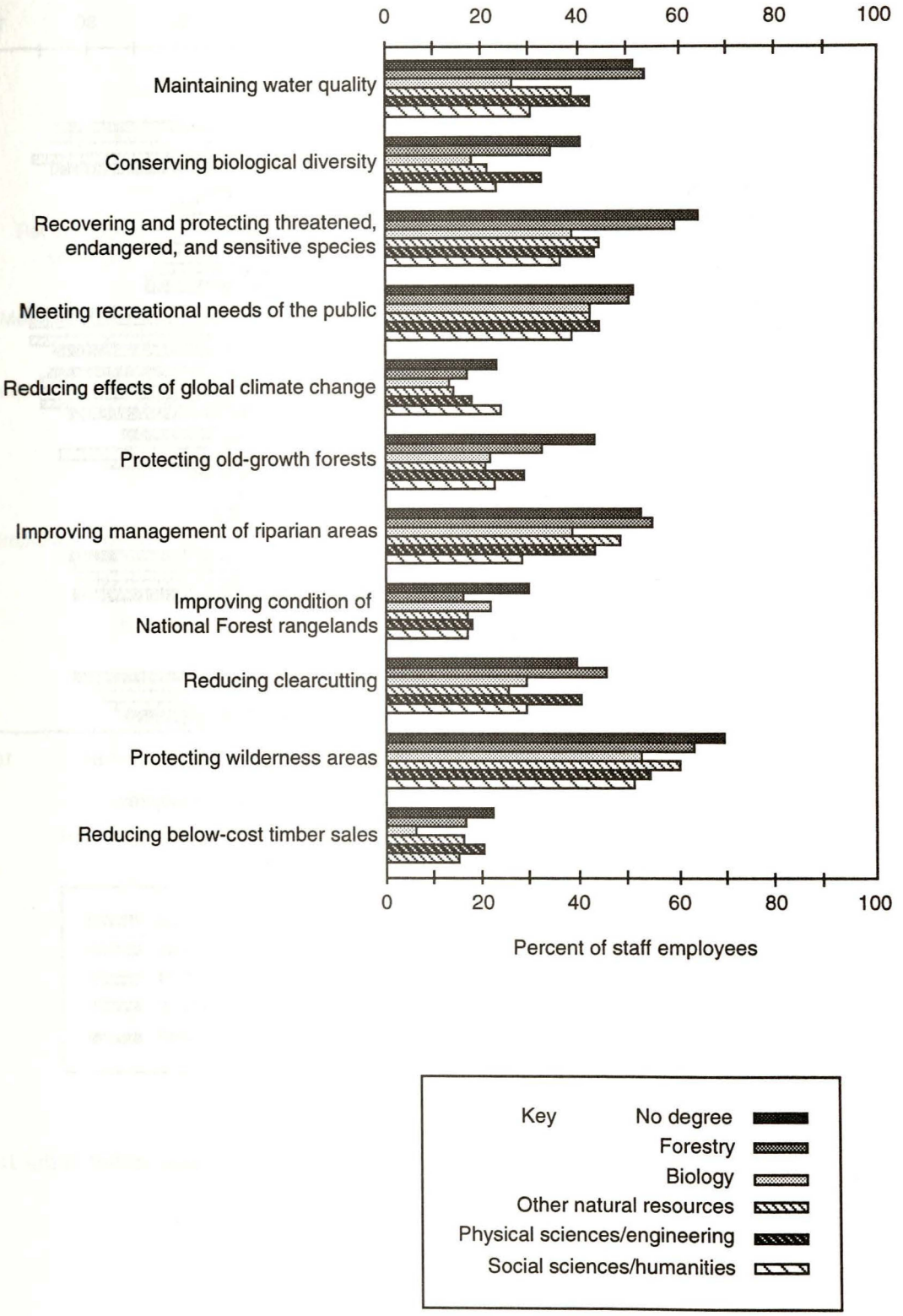


Figure 36.—*Percent of Forest Service* ***staff*** *employees indicating that the Agency is very committed to addressing an RPA issue, by discipline.*

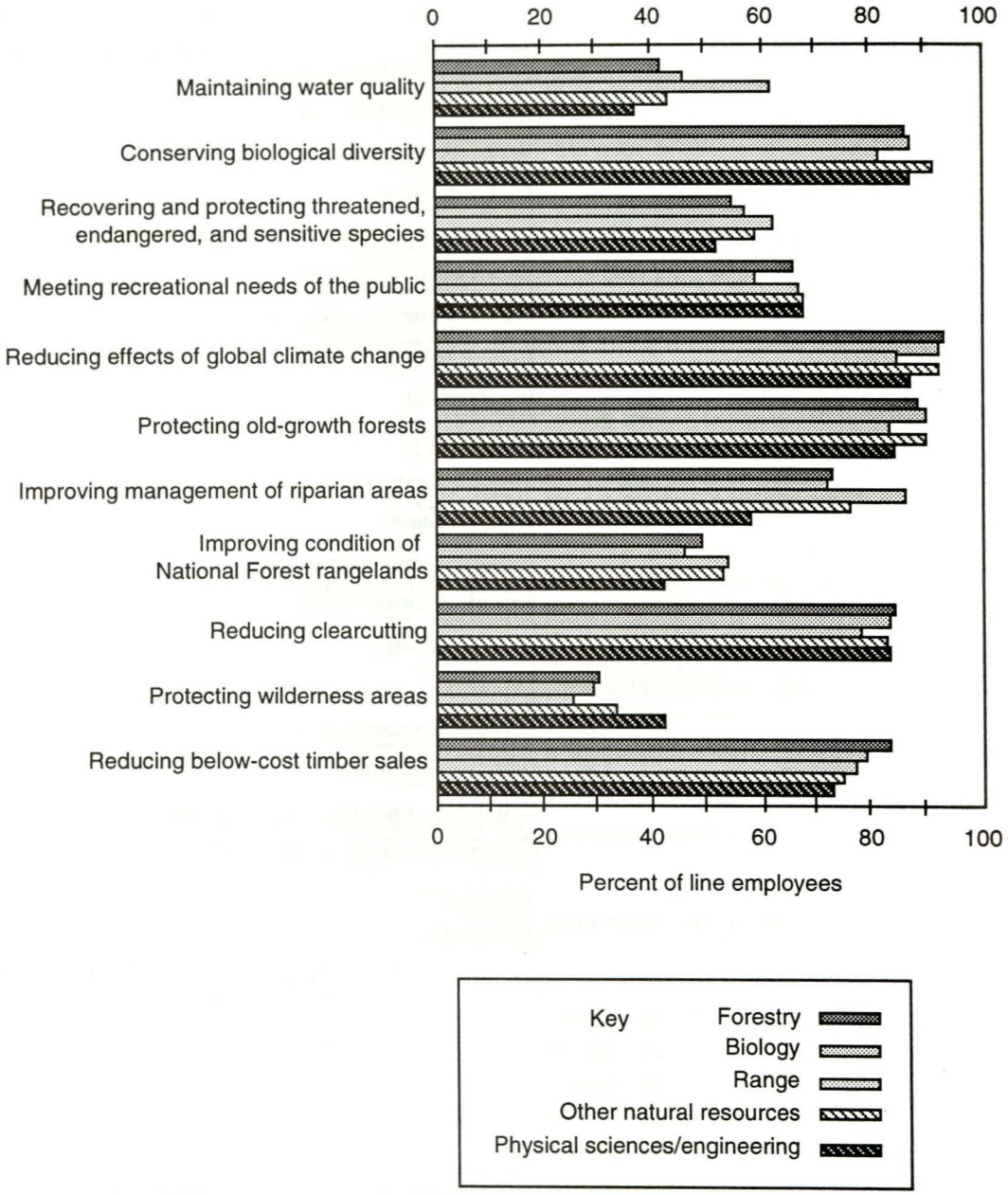


Figure 37.—*Percent of Forest Service* ***line*** *employees indicating that the policy stated in the 1990 RPA has changed over the past 10 years, by discipline.*

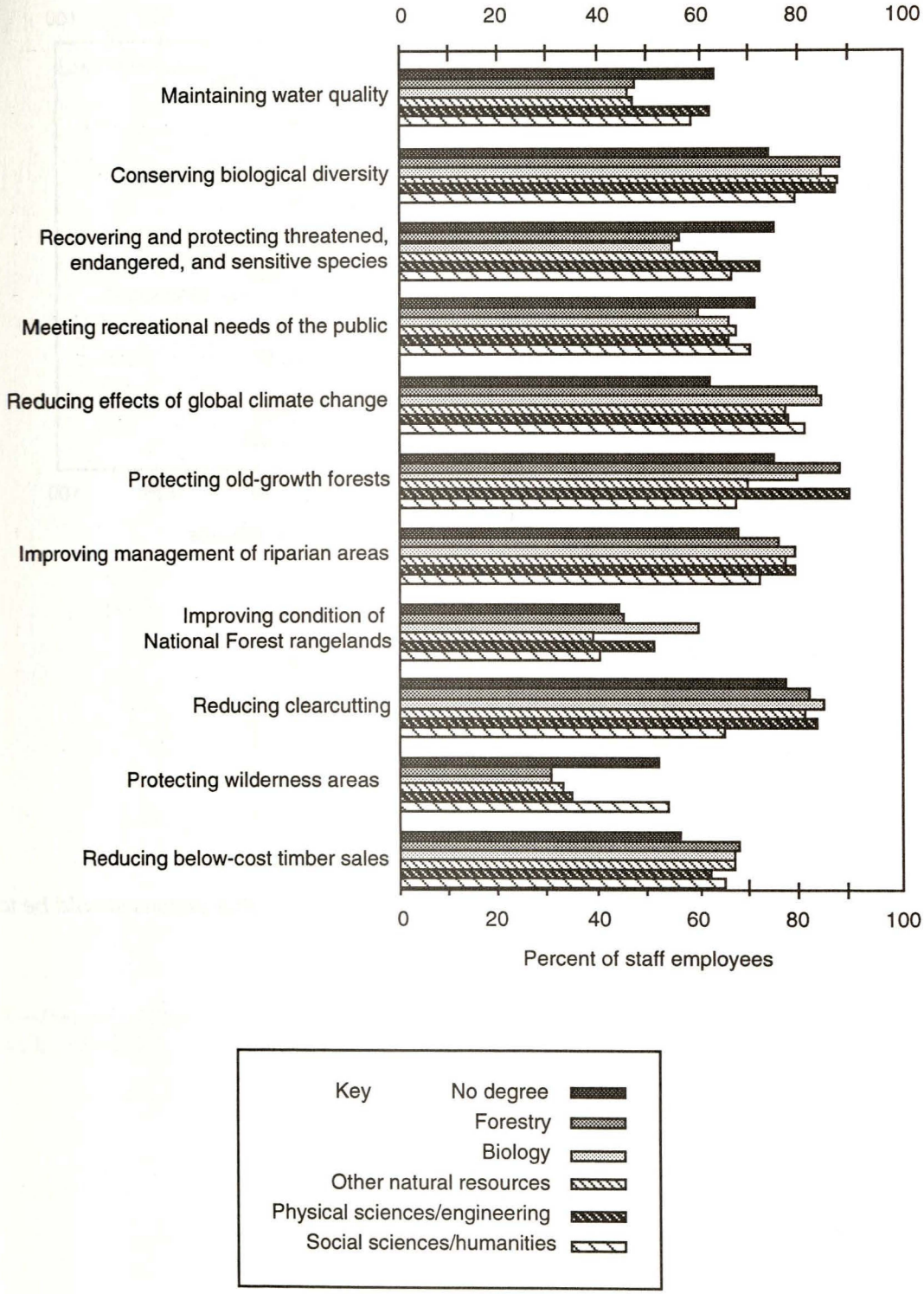


Figure 38.—*Percent of Forest Service* ***staff*** *employees indicating that the policy stated in the 1990 RPA has changed over the past 10 years, by discipline.*

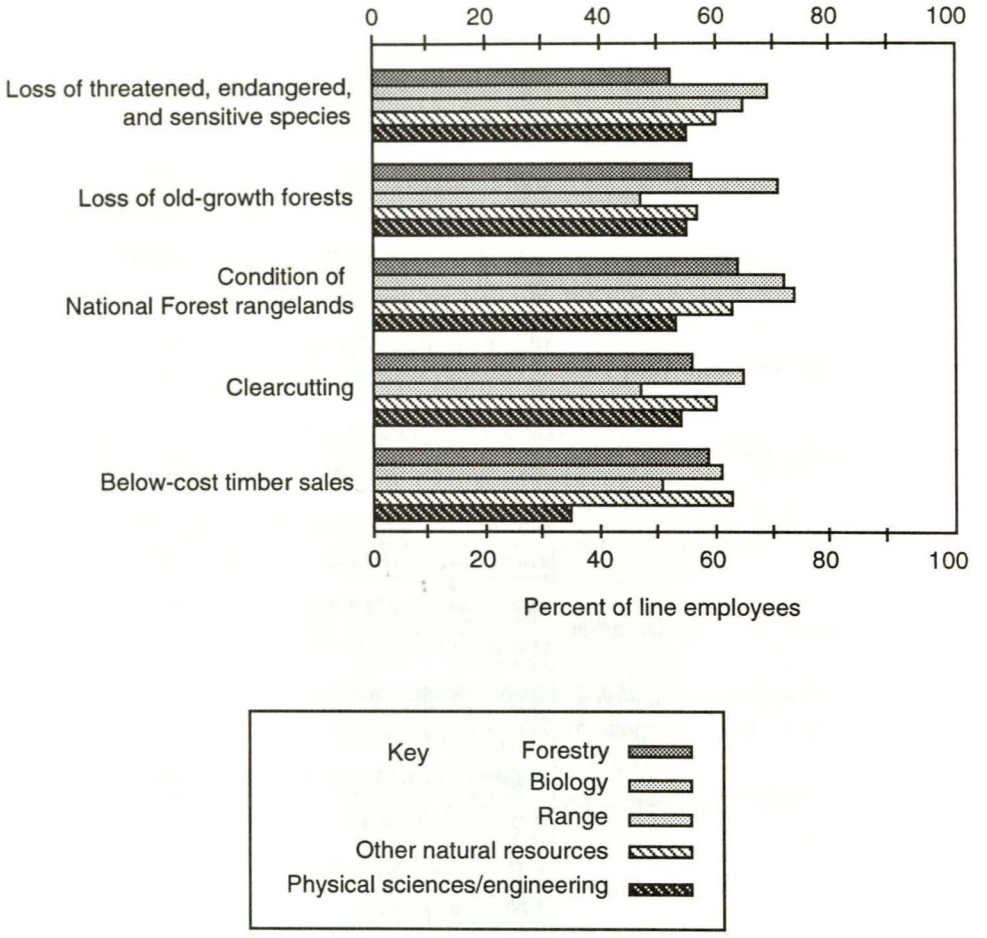


Figure 39.—*Percent of Forest Service* ***line*** *employees indicating that further actions should be taken on an issue, by discipline.*

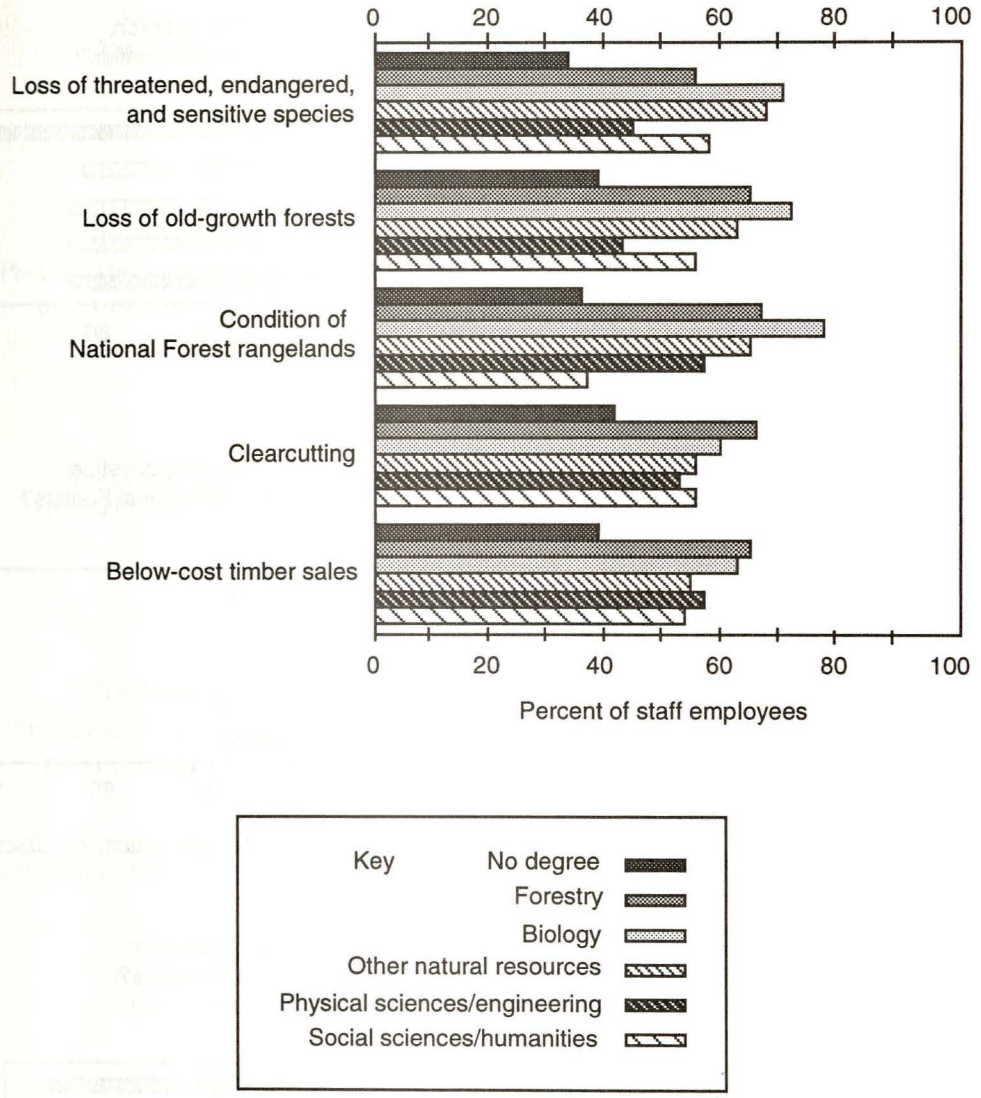
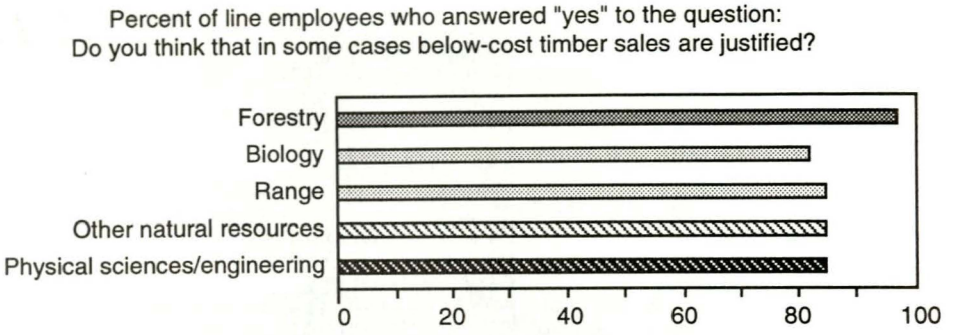


Figure 40.—*Percent of Forest Service* ***staff*** *employees indicating that further actions should be taken on an issue, by discipline.*



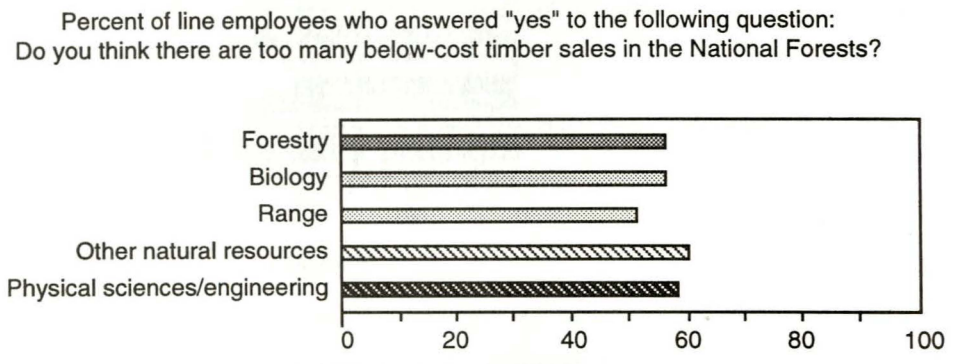
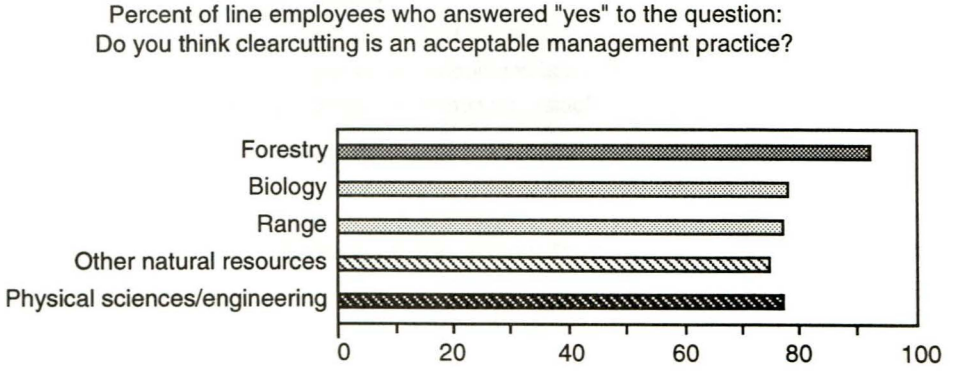


Figure 41.—*Opinions of Forest Service* ***line*** *employees on below-cost timber sales, by discipline.*



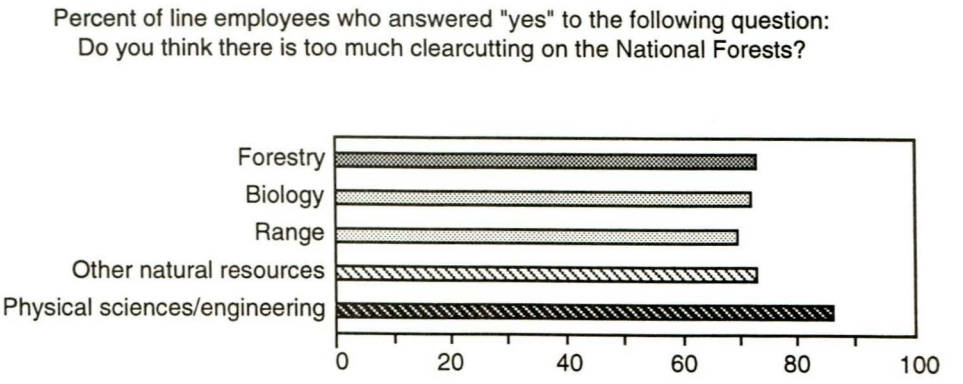
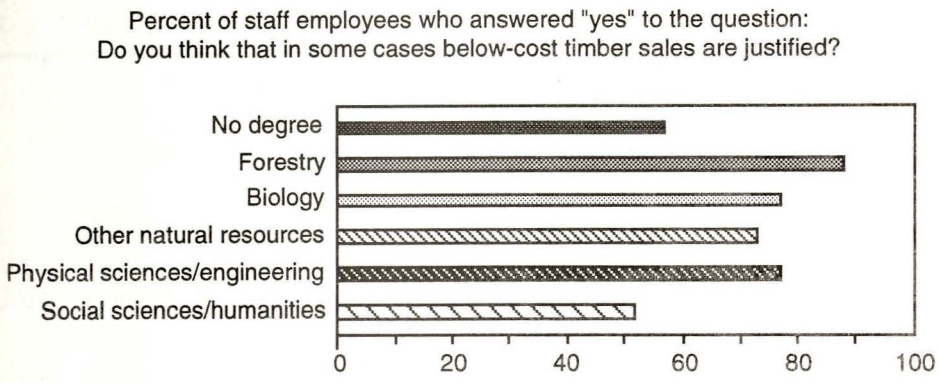


Figure 42.—*Opinions of Forest Service* ***line*** *employees on clearcutting, by discipline.*



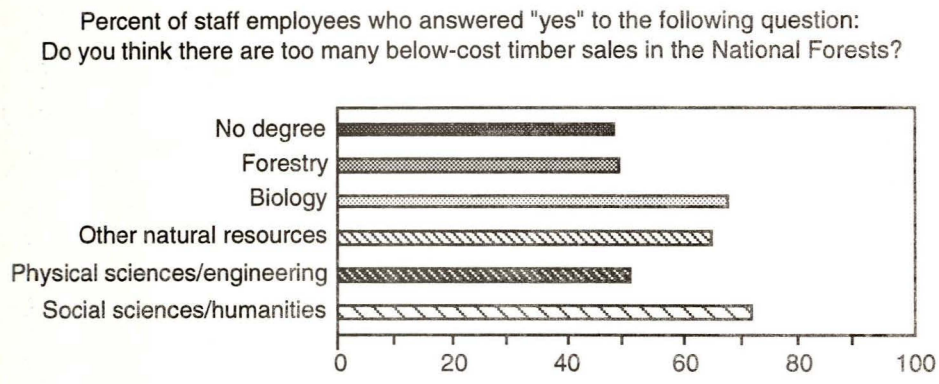
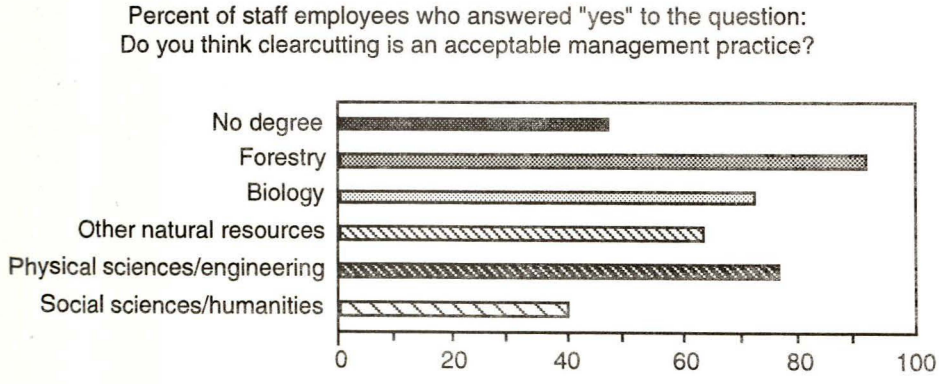


Figure 43.—*Opinions of Forest Service* ***staff*** *employees on below-cost timber sales, by discipline.*



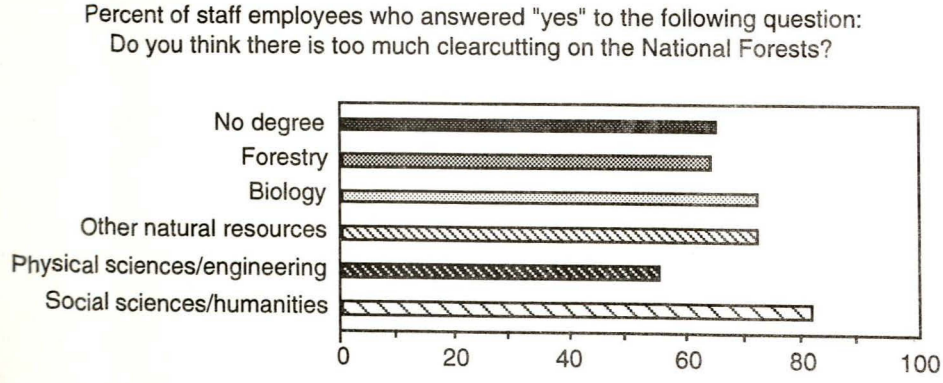


Figure 44.—*Opinions of Forest Service* ***staff*** *employees on clearcutting, by discipline.*

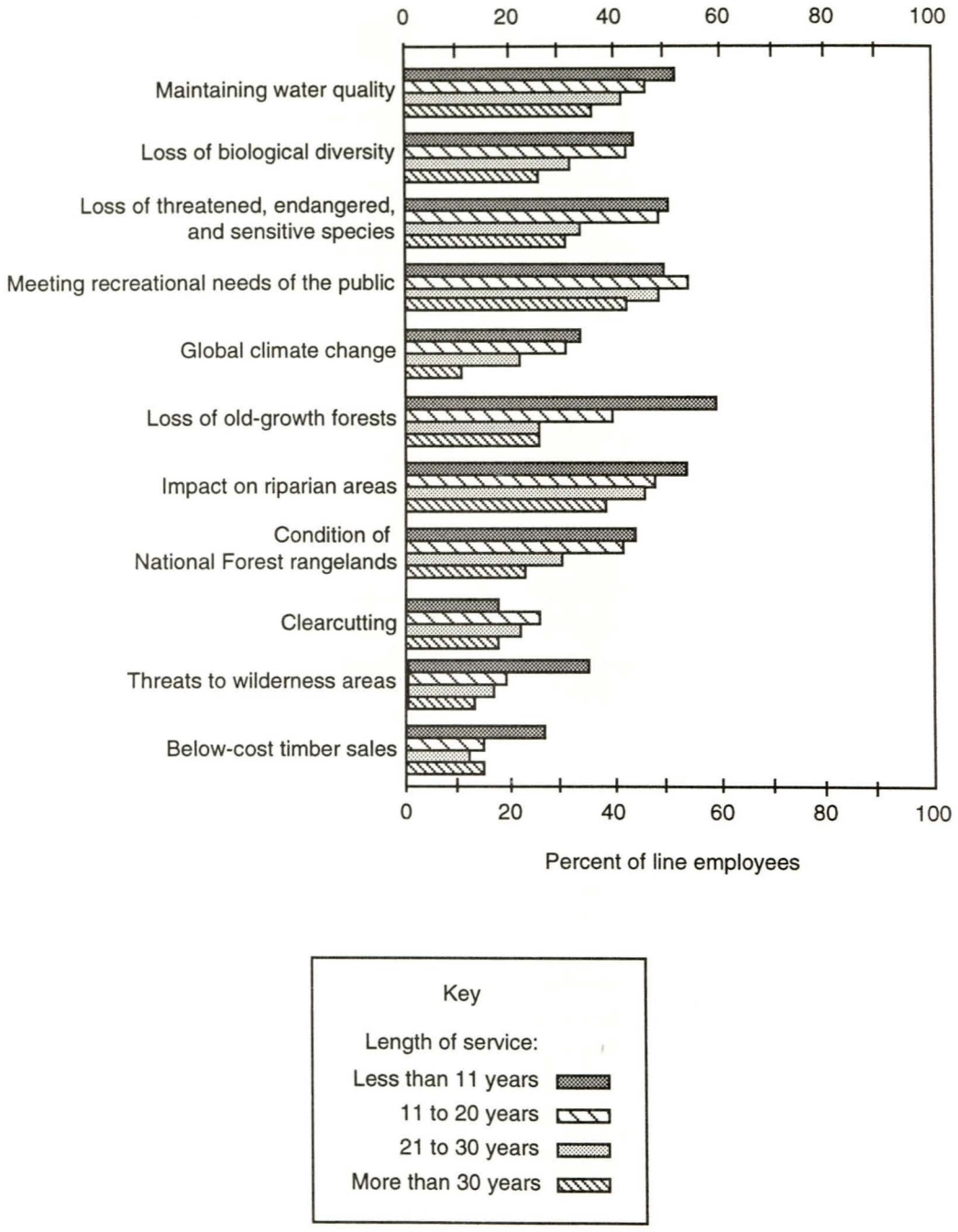


Figure 45.—*Percent of Forest Service* ***line*** *employees indicating that an RPA issue is very serious, by length of service.*

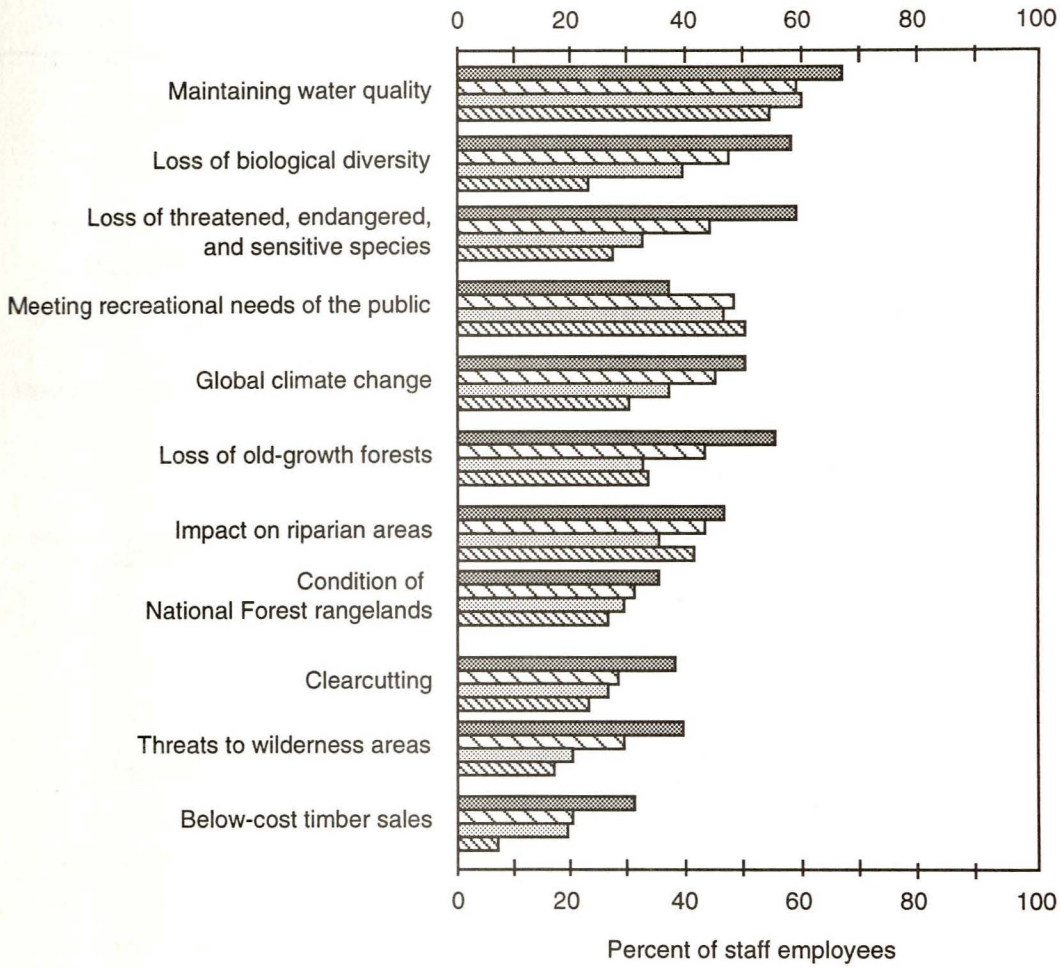


Figure 46.—*Percent of Forest Service* ***staff*** *employees indicating that an RPA issue is very serious, by length of service.*

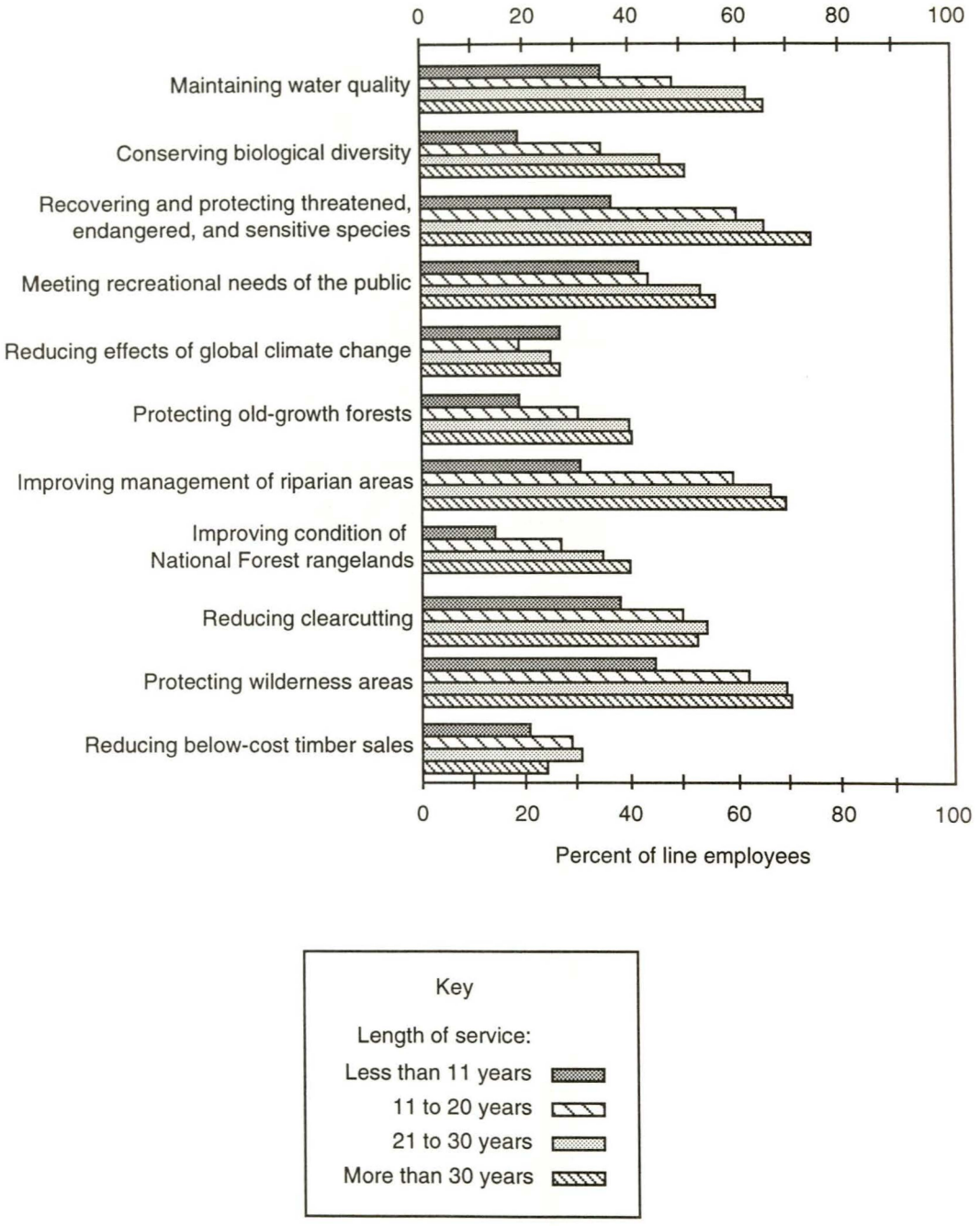


Figure 47.—*Percent of Forest Service* ***line*** *employees indicating that the Agency is very committed to addressing an RPA issue, by length of service.*

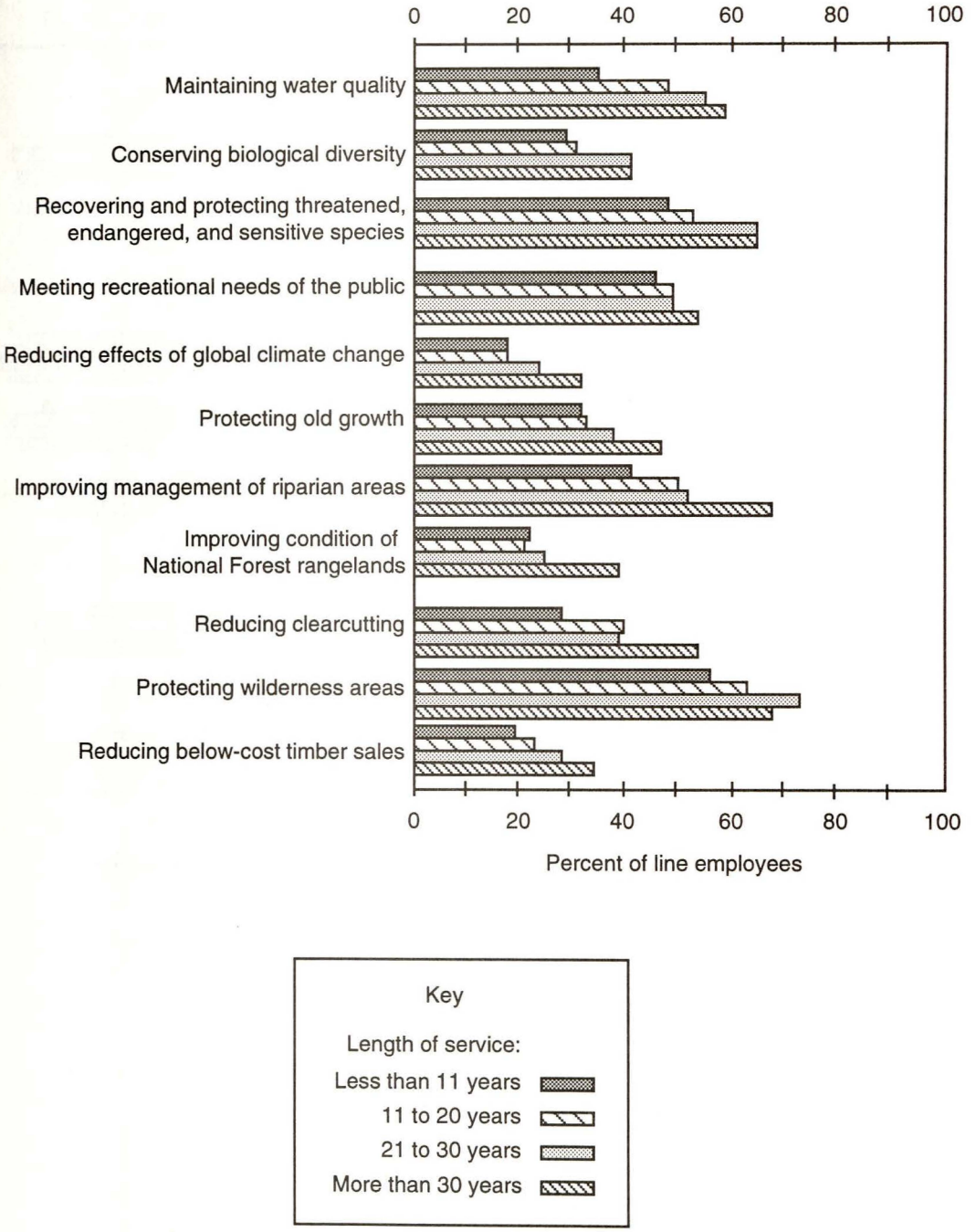


Figure 48.—*Percent of Forest Service* ***staff*** *employees indicating that the Agency is very committed to addressing an RPA issue, by length of service.*

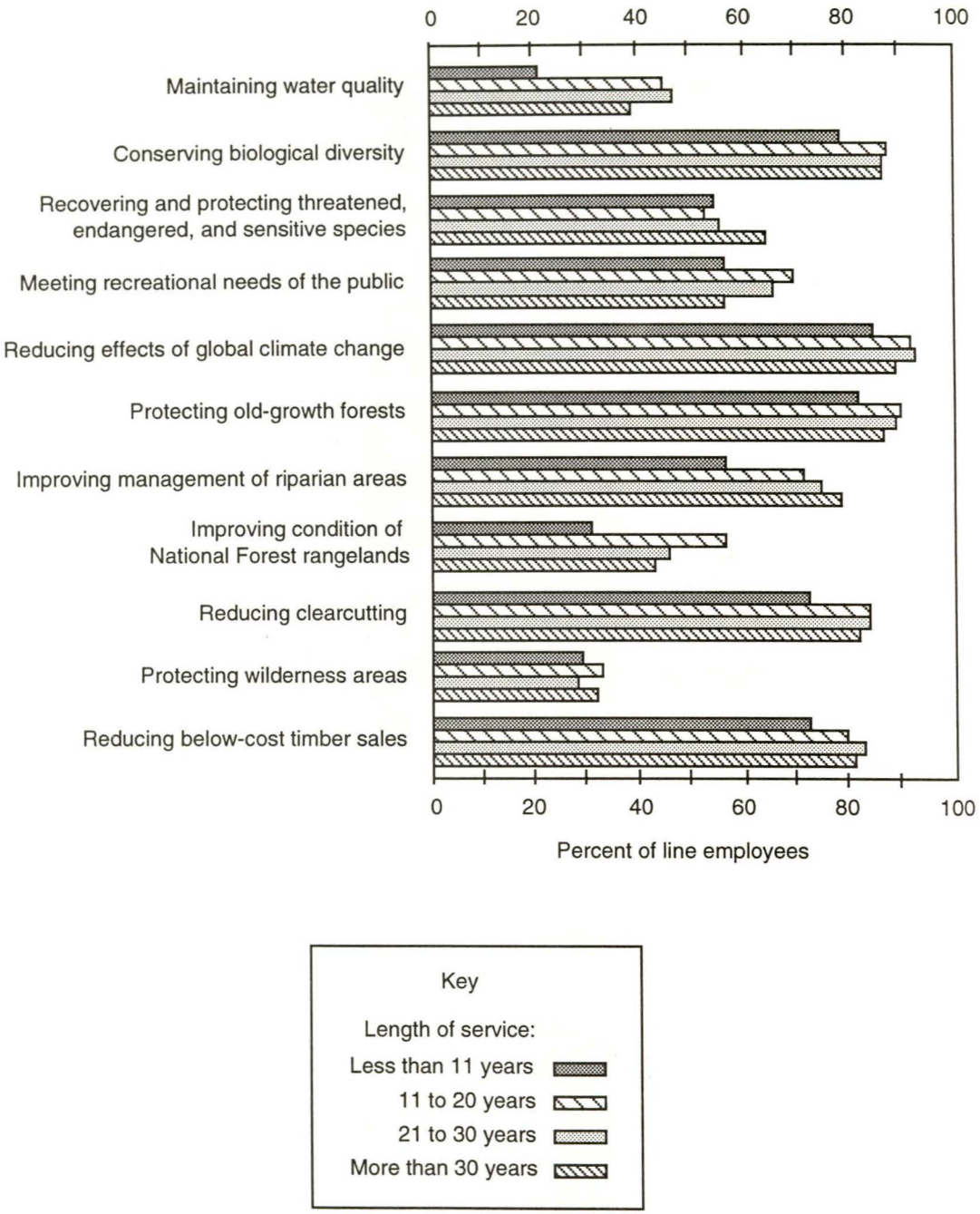


Figure 49.—*Percent of Forest Service* ***line*** *employees indicating that the policy stated in the 1990 RPA has changed over the past 10 years, by length of service.*

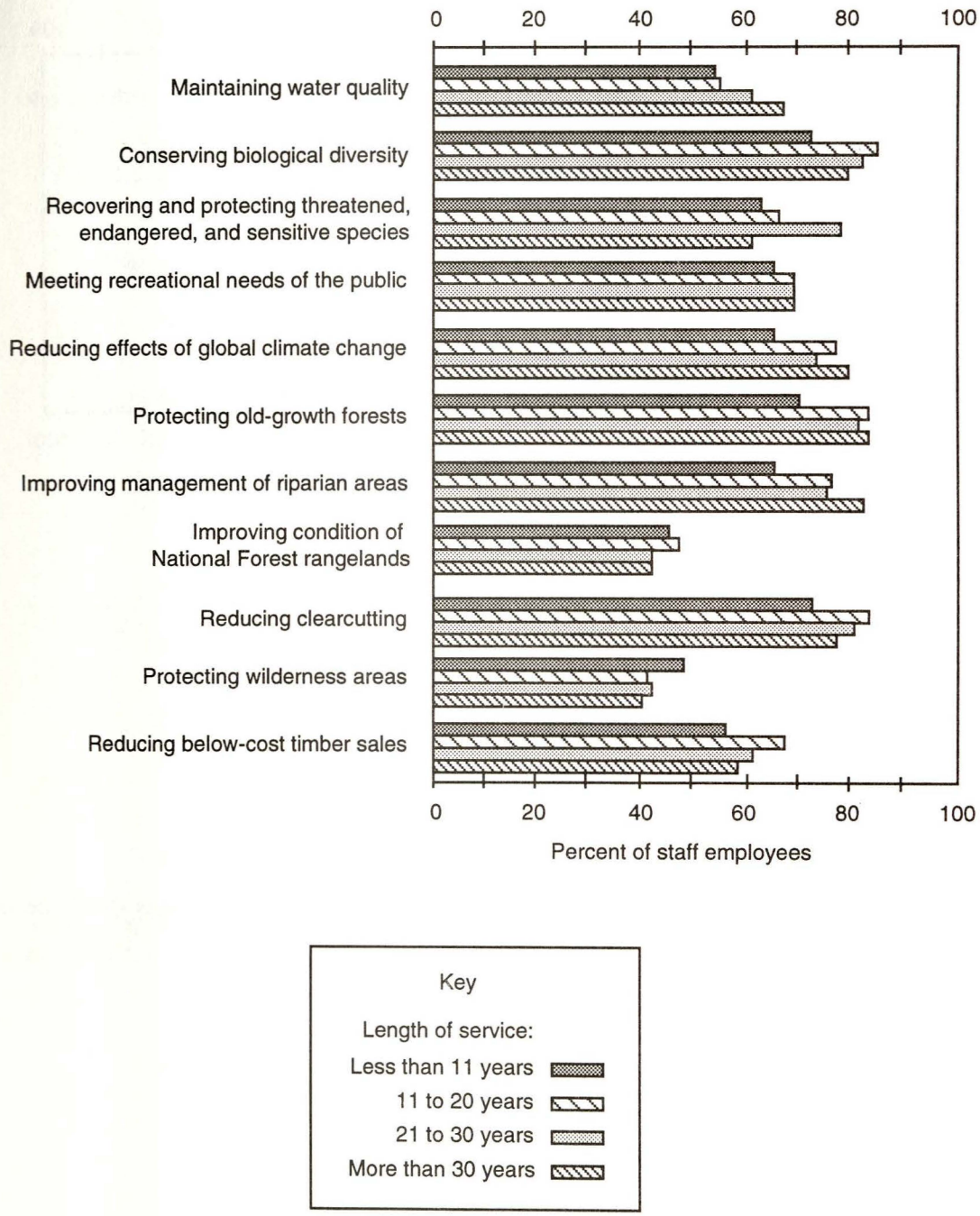


Figure 50.—*Percent of Forest Service* ***staff*** *employees indicating that the policy stated in the 1990 RPA has changed over the past 10 years, by length of service.*

Figure 51.—*Percent of Forest Service* ***line*** *employees indicating that further actions should be taken on an issue, by length of service.*

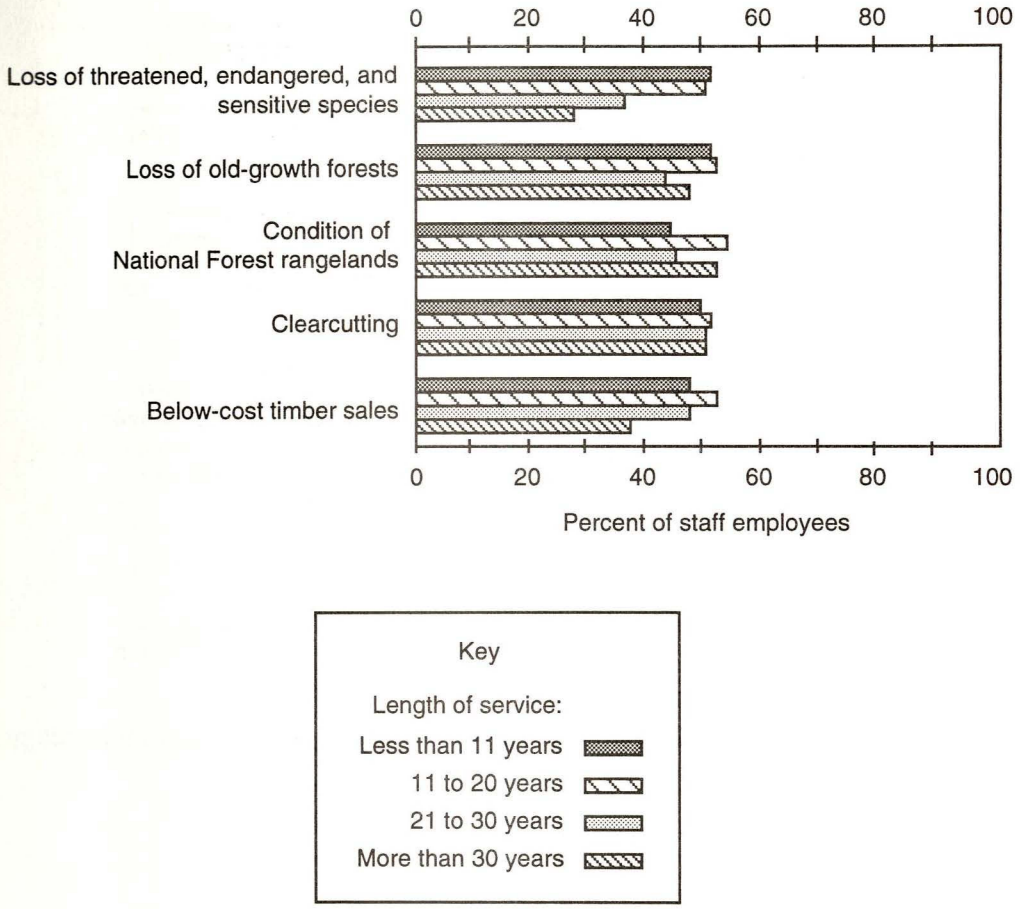


Figure 52.—*Percent of Forest Service* ***staff*** *employees indicating that further actions should be taken on an issue, by length of service.*

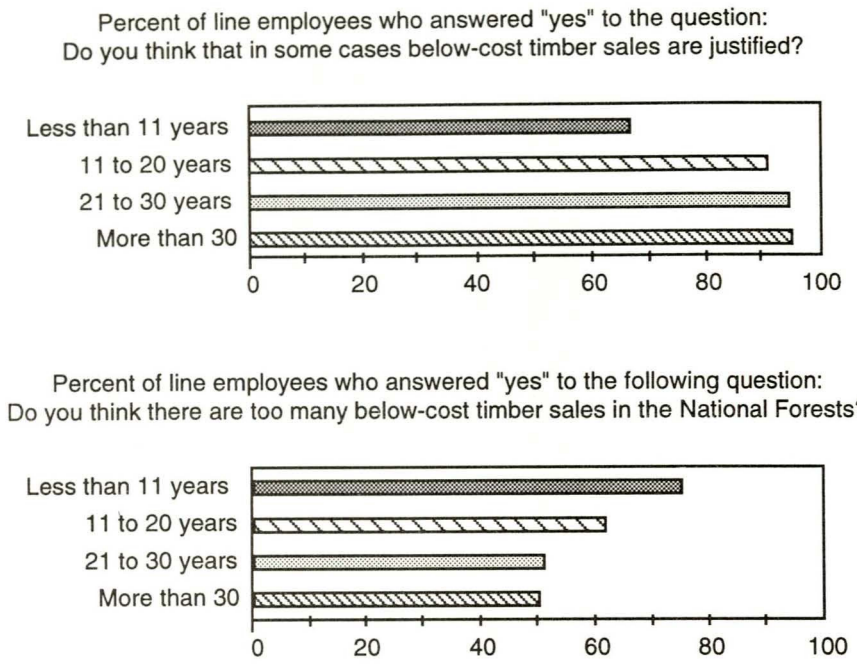


Figure 53.—*Opinions of Forest Service* ***line*** *employees on below-cost timber sales, by length of service.*

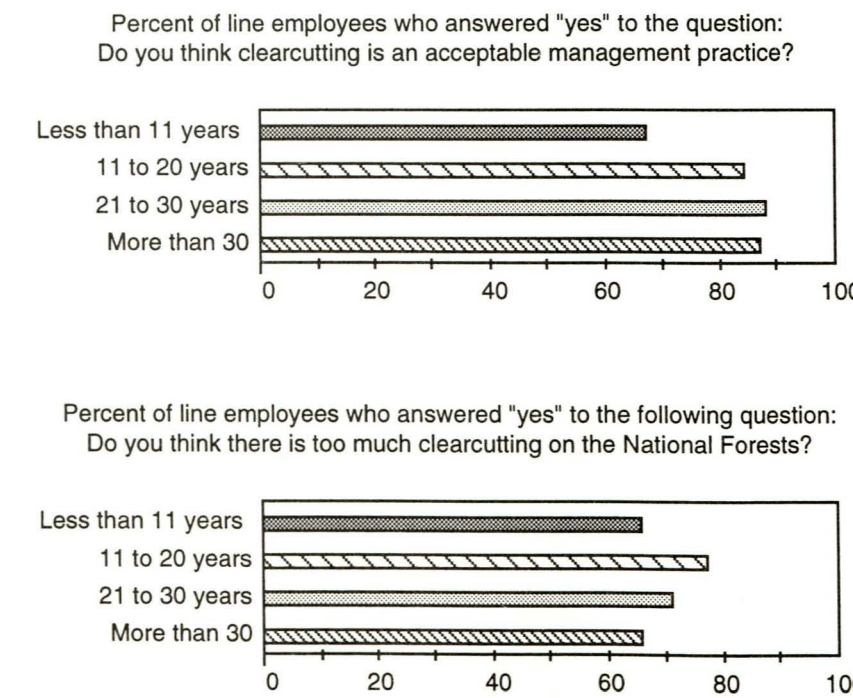
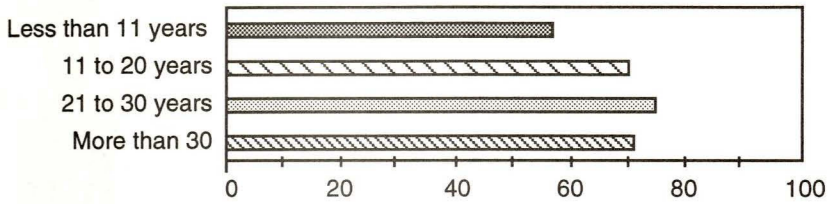


Figure 54.—*Opinions of Forest Service* ***line*** *employees on clearcutting, by length of service.*

Percent of staff employees who answered "yes" to the question:
Do you think that in some cases below-cost timber sales are justified?



Percent of staff employees who answered "yes" to the following question:
Do you think there are too many below-cost timber sales in the National Forests?

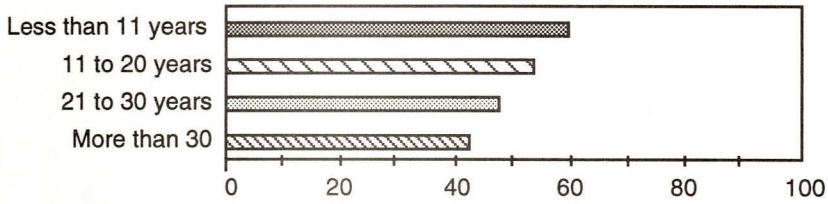
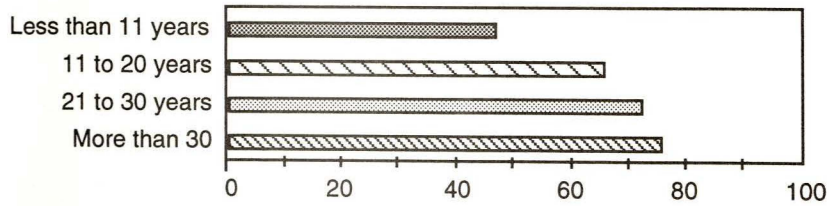


Figure 55.—*Opinions of Forest Service* ***staff*** *employees on below-cost timber sales, by length of service.*

Percent of staff employees who answered "yes" to the question:
Do you think clearcutting is an acceptable management practice?



Percent of staff employees who answered "yes" to the following question:
Do you think there is too much clearcutting on the National Forests?

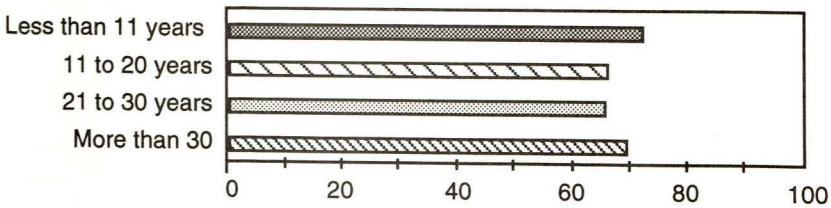


Figure 56.—*Opinions of Forest Service* ***staff*** *employees on clearcutting, by length of service.*

APPENDIX

THE UNIVERSITY OF MICHIGAN FOREST SERVICE SURVEY

Paul Mohai and Phyllis Stillman

School of Natural Resources and Environment
University of Michigan
Ann Arbor, Mi 48109

SECTION A

Let's start with a few questions about you.

A1. First, what is your age?

Line	Staff	
47	43	Average age (in years)

A2. Which of the following best describes the place where you lived the longest when you were growing up—large city; suburb of a large city; city, town, or village; rural area; farm or ranch?

Line	Staff	(In percent)
12	9	1. Large city (250,000 or more)
17	18	2. Suburb of a large city
33	32	3. City, town, or village (not the suburb of a large city)
22	23	4. Rural area (not a farm or ranch)
15	17	5. Farm or ranch
0	0	8. Don't know

A3. Did you graduate from high school or obtain a GED (Graduate equivalency degree)?

Line	Staff	(In percent)
100	98	1. Yes
0	2	2. No —> Go to A8

A4. Did you attend college?

Line	Staff	(In percent)
100	87	1. Yes
0	13	2. No —> Go to A8

A5. Do you have a Bachelor's Degree?

Line	Staff	(In percent)
100	64	1. Yes
0	36	2. No —> Go to A8

A5a. What field is it in? (If unsure, ask for major.)

LINE EMPLOYEES

Forestry

1. Forestry; forest resources; forest science
2. Forest management; forest resources management
3. Forest biometry
4. Forest economics
5. Forest service/planning development, utilization
6. Forest product tech; wood science & tech
7. Forest ecology
8. Silviculture
9. Forest biology
10. Forestry, nec[a], nsf[b]

Biology

11. Wildlife
12. Wildlife biology
13. Wildlife science
14. Wildlife management
15. Wildlife ecology
48. Fish, fisheries
21. Biology
23. Zoology
33. Botany
44. Plant physiology
45. Plant pathology

Range

32. Range science; management

Other Natural Resources

24. Animal science
31. Ecology; environment
34. Hydrology; watershed management
35. Agriculture; agronomy
36. Agricultural economics
37. Agricultural law
38. Soils; soil science
39. (Natural) resource management; (natural) resources
40. Resource economics
41. Natural resources adminstration
42. Earth science
43. Recreation
46. Conservation
47. Landscape architecture
49. Wilderness management
50. Earth science, nec[a], nfs[b]

Physical Science/Engineering

22. Bio-chemistry
55. Mathematics; statistics
56. Physics
57. Chemistry
61. Engineering—aeronautical, civil
70. Sciences, nfs[b]

Other

51. Anthropology, sociology, psychology, counseling, social work
52. Political science
53. Geography
54. History
58. Accounting, financial management
59. Economics
60. Business; public administration
62. Food, science & technology, home economics
63. Education (any level)
64. Library science
80. Humanities; liberal arts, nec[a], nfs[b]
97. Other

STAFF EMPLOYEES

Forestry

1. Forestry; forest resources; forest science
2. Forest management; forest resources management
3. Forest biometry
4. Forest economics
5. Forest service/planning development, utilization
6. Forest product tech; wood science & tech
7. Forest ecology
8. Silviculture
9. Forest biology
10. Forestry, nec[a], nfs[b]

Biology

11. Wildlife
12. Wildlife biology
13. Wildlife science
14. Wildlife management
15. Wildlife ecology
48. Fish, fisheries
21. Biology
23. Zoology
33. Botany
44. Plant physiology
45. Plant pathology

Other Natural Resources

24. Animal science
31. Ecology; environment
34. Hydrology; watershed management
35. Agriculture; agronomy
36. Agricultural economics
37. Agricultural law
38. Soils; soil science
39. (Natural) resource management; (natural) resources
40. Resource economics
41. Natural resources administration
42. Earth science
43. Recreation
46. Conservation
47. Landscape architecture
49. Wilderness management
50. Earth science, nec[a], nfs[b]

Physical Science/Engineering

22. Bio-chemistry
55. Mathematics; statistics
56. Physics
57. Chemistry
61. Engineering—aeronautical, civil
70. Sciences, nfs[b]

Social Sciences/Humanities

51. Anthropology, sociology, psychology, counseling, social work
52. Political science
53. Geography
54. History
59. Economics
63. Education (any level)
64. Library science
80. Humanities; liberal arts, nec[a], nfs[b]

[a] nec: not elsewhere classified
[b] nfs: not further specified

Other

32. Range science; management
60. Business; public administration
97. Other
58. Accounting; financial management
62. Food, science and technology; home economics

Ask if line or staff (if staff — ask if PATCO code of "P" is assigned)[1]:

A5b. From which school did you obtain this degree?

56. Arkansas
01. U of Arizona
02. Auburn U
36. California Polytechnical Institute (Cal Poly, Cal Poly-Tech)
03. U of California (Berkeley)
64. Other California Universities
05. Duke
06. U of Georgia
08. U of Idaho
09. U of Illinois
57. Louisiana Polytech
12. U of Maine
14. U of Michigan
38. Michigan Technological Inst. (Michigan Tech, MTI)
17. Mississippi State U
61. Montana State
20. U of New Hampshire
21. North Carolina State U
51. Oklahoma State
23. Pennsylvania State U (Penn State)
42. Rutgers
25. Syracuse (U of NY)
26. Texas A & M U
28. U of Vermont
30. West Virginia U
40. Washington State
59. U of Wisconsin (Stevens Point)
45. Eastern universities and colleges, nec
55. Southern universities and colleges, nec
65. Other universities and colleges, unknown location or foreign
97. Other
98. Don't know
99. Not applicable
53. Arizona State
35. Northern Arizona U
63. Brigham Young
66. U of Calif (Davis)
04. Colorado State
37. U of Florida
07. Humbolt State U
52. Southern Illinois
10. Iowa State U (Ames)
11. Louisiana State
13. U of Massachusetts
15. Michigan State University (MSU)
16. U of Minnesota (Minneapolis)
18. U of Missouri
19. U of Montana
62. New Mexico State
39. Ohio State
22. Oregon State U
24. Purdue
41. Stephen F. Austin State U
58. University of Tennessee
27. Utah State
29. Virginia Polytech Inst. &State U (Virginia Tech, VPI)
31. U of Washington
32. U of Wisconsin (Madison)
33. Yale
50. Midwestern universities and Colleges, nec
60. Western universities and Colleges, nec

A6. Do you have a Master's Degree?

Line	Staff	(In percent)
37	27	1. Yes
63	73	2. No —> Go to A7

A6a. What field is it in?

See A5a for codes

Ask if line or staff (if staff — ask if PATCO code of "P" is assigned):

A6b. From which school did you obtain this degree?

See A5b for codes

A7. Do you have a Doctorate?

Line	Staff	(In percent)
18	6	1. Yes
82	94	2. No —> Go to A8

A7a. What field is it in?

See A5a for codes

Ask if line or staff (if staff — ask if PATCO code of "P" is assigned):

A7b. From which school did you obtain this degree?

See A5b for codes

[1]PATCO is an officially assigned code to denote whether position held falls in the professional, administrative, technical, clerical or other category.

[a] nec: not elsewhere classified

[b] nfs: not further specified

A8. In this survey, I'm going to be asking you about current and future roles and policies of the Forest Service. We are interested in both your personal opinions on different issues, and how you think the Forest Service looks at some of the same issues.

But first, briefly, what do you think is the single greatest challenge facing the Forest Service today?

Public Relations

Line	Staff	(In percent)	
2.4	4.2	1.	Bad public image; improve public relations
23.4	17.4	2.	Need to do/identify what the public wants; respond to changing values/perceptions of public/society
10.0	4.9	3.	Maintaining/regaining credibility; public trust
4.2	2.4	5.	Educate public, explain programs/management methods
1.3	.4	7.	Balance between proper management and public opinion
.7	.4	8.	Providing services for visitors
.6	.9	10.	Public relations/public concerns, nec[a], nfs
.1	.7	47.	Respond too much to public/interest groups, need to defend policies

Politics/Interference

Line	Staff	(In percent)	
2.6	1.3	28.	Finite resources, increasing demand, many demands on the same piece of land
1.6	2.8	31.	Resolve/balance commodity/politics vs environmental issues
10.3	7.7	43.	Conflicting demands from different groups (mentions one or more of the following: public, Congress, interest groups, administration, etc.); can't please everybody
1.2	.9	44.	Congressional mandates/interference; getting politicians out of forest management
2.1	5.3	45.	Lack of funding; funding constraints; economic problems
1.2	.7	46.	Maintaining autonomy; survival
1.3	2.2	51.	Dealing with laws, rules, regulations, appeals
1.1	.9	60.	Political issues, nec[a], nfs[b]

Maintaining Stewardship

Line	Staff	(In percent)	
7.5	3.9	11.	Maintaining proper balance, commodity vs amenity/non-commodity
1.6	.7	13.	Implementation/approval of existing forest plans
.4	.6	15.	Land management; land vs timber
2.0	.2	16.	Maintaining/re-establishing leadership in forestry/multiple use/natural resource management, etc.
1.3	.9	17.	Sustainability; maintaining resources; future generations
3.5	2.4	18.	Stewardship; land ethic; conservation; ethical/objective resource management; high quality management
1.2	2.9	20.	Decrease emphasis on timber; balance timber with ammenities; determine proper balance
.7	.8	21.	Preservation— need to, pressure for
3.0	2.6	22.	Managing for entire ecosystem
.9	1.1	23.	Increase emphasis on non-commodities, e.g., recreation/decrease emphasis on commodities
.4	.7	24.	Balance between resource management and local economic concerns
.5	4.0	25.	Timber, nec, nfs
.6	3.1	26.	Mention of spotted owl, old growth, T&E, wilderness
.1	.4	29.	Maintaining/protecting biodiversity
1.3	2.5	30.	Resource issues, nec, nfs
3.4	5.2	32.	Responding to environmental concerns; managing without harming ecology/environment
1.1	2.6	33.	Dealing with environmental movement/environmentalists
1.6	2.8	40.	Environmental issues/concerns, nec[a], nfs[b]
2.9	3.0	41.	Moving away from stewardship because of politics; need to manage forests properly despite pressures

Internal Problems

Line	Staff	(In percent)	
1.7	4.5	61.	Employment/human resource management problems — morale, heavy workloads, etc.
.9	2.2	62.	Promoting work force diversity
.2	.9	63.	Slowing down work force diversity, problems with consent decree
2.8	4.0	65.	Workforce diversity, nec, nfs
4.1	2.9	67.	Difficulties/slowness in adapting to change; speed of change
5.2	3.0	68.	Need clear statement of mission; common direction; Forest Service has lost sight of mission, goal
.2	.5	69.	Increasing technical complexity of management methods; need to become more computer literate
.9	1.5	70.	Need for/lack of good leadership within Forest Service; poor communication from top down
.2	.3	72.	Need to increase work force, not enough people
.5	.7	74.	Not enough emphasis on work on the ground; decisions come from higher up; too much bureaucracy
1.5	3.2	80.	Internal problems, nec[a], nfs[b]

Maintaining Output

Line	Staff	(In percent)
1.5	1.2	12. Maintaining forest productivity
5.3	4.6	19. Maintaining multiple use management; multiple use vs single use interest groups
.2	1.0	27. Dealing with reduced timber cuts, not allowed to cut
.7	.0	90. Change, nfs[b]
.3	.7	97. Other
.1	1.4	98. Don't know

SECTION B

One of the roles of the Forest Service is multiple use management. I would like to ask you some questions about this role.

B1. For each of the following multiple use objectives I mention, please tell me whether Forest Service emphasis on that use has increased a great deal, increased somewhat, stayed about the same, decreased somewhat or decreased a great deal over the past 10 years.

B1.1 First, timber. Over the past 10 years, has Forest Service emphasis on timber increased a great deal, increased somewhat, stayed about the same, decreased somewhat, or decreased a great deal?

Line	Staff	(In percent)
7	14	1. Increased a great deal
11	17	2. Increased somewhat
26	22	3. Stayed about the same
43	32	4. Decreased somewhat
12	12	5. Decreased a great deal
1	3	8. Don't know

B1.2 How about grazing....? (Over the past 10 years, has emphasis on . . . increased a great deal, increased somewhat, stayed about the same, decreased somewhat, or decreased a great deal?)

Line	Staff	(In percent)
5	4	1. Increased a great deal
11	15	2. Increased somewhat
46	42	3. Stayed about the same
28	19	4. Decreased somewhat
5	5	5. Decreased a great deal
6	15	8. Don't know

B1.3 (How about) recreation ...? (Over the past 10 years, has emphasis on . . . a great deal, increased somewhat, stayed about the same, decreased somewhat, or decreased a great deal?)

Line	Staff	(In percent)
50	48	1. Increased a great deal
44	40	2. Increased somewhat
4	7	3. Stayed about the same
1	2	4. Decreased somewhat
0	1	5. Decreased a great deal
1	1	8. Don't know

B1.4 (How about) wildlife and fish ... ? (Over the past 10 years, has emphasis on . . . a great deal, increased somewhat, stayed about the same, decreased somewhat, or decreased a great deal?)

Line	Staff	(In percent)
64	51	1. Increased a great deal
34	36	2. Increased somewhat
2	9	3. Stayed about the same
0	1	4. Decreased somewhat
0	0	5. Decreased a great deal
1	2	8. Don't know

B1.5 (How about) water ... ? (Over the past 10 years, has emphasis on . . . a great deal, increased somewhat, stayed about the same, decreased somewhat, or decreased a great deal?)

Line	Staff	(In percent)
18	25	1. Increased a great deal
47	43	2. Increased somewhat
33	25	3. Stayed about the same
1	2	4. Decreased somewhat
0	1	5. Decreased a great deal
1	4	8. Don't know

B1.6 (How about) minerals ... ? (Over the past 10 years, has emphasis on . . . a great deal, increased somewhat, stayed about the same, decreased somewhat, or decreased a great deal?)

Line	Staff	(In percent)
3	6	1. Increased a great deal
18	20	2. Increased somewhat
61	53	3. Stayed about the same
14	11	4. Decreased somewhat
1	2	5. Decreased a great deal
4	9	8. Don't know

B1.7 (How about) wilderness ... ? (Over the past 10 years, has emphasis on . . . a great deal, increased somewhat, stayed about the same, decreased somewhat, or decreased a great deal?)

Line	Staff	(In percent)
34	33	1. Increased a great deal
48	40	2. Increased somewhat
16	21	3. Stayed about the same
2	2	4. Decreased somewhat
0	0	5. Decreased a great deal
1	3	8. Don't know

B2a. Next, I am going to read you a list of 5 of the multiple use objectives we just talked about, including: timber, grazing, recreation, wildlife and fish, and water.

Then, I will ask you some questions to help you rank these 5 uses according to how important you as an individual, think each of these uses of the national Forests should be.

Of timber, grazing, recreation, wildlife and fish, and water, which of these 5 uses is the most important to you personally?

B2b. Of (read list), which is the least important to you personally?

B2c. Of (read list), which is the most important to you personally?

B2d. Of (read list), which is the least important to you personally?

Most Important to the Individual

Line	Staff	(In percent)
14	22	Timber
3	1	Grazing
27	34	Recreation
16	21	Wildlife and fish
30	19	Water
6	3	All most important
4	1	Don't know

Least Important to the Individual

Line	Staff	(In percent)
68	72	Grazing
3	4	Recreation
16	12	Timber
1	5	Wildlife and fish
3	4	Water
5	2	All most important
4	1	Don't know

B3a. Now, please think about these objectives again, including: timber, grazing, recreation, wildlife and fish, and water. This time I will ask about how important you think each use is to the Forest Service?

First, which of (read list) is the most important to the Forest Service?

B3b. Of (read list), which is the least important to the Forest Service?

B3c. Of (read list), which is the most important to the Forest Service?

B3d. Of (read list), which is the least important to the Forest Service?

Most Important to the Forest Service:

Line	Staff	(In percent)
61	72	Timber
1	0	Grazing
14	13	Recreation
5	6	Wildlife and fish
10	5	Water
5	4	All most important
4	1	Don't know

[a] nec: not elsewhere classified
[b] nfs: not further specified

Least Important to Forest Service:

Line	Staff	(In percent)
1	2	Timber
50	53	Grazing
5	8	Recreation
6	9	Wildlife and Fish
28	22	Water
6	5	All Most Important
4	1	Don't know

B4. How committed do you think the Forest Service is to protecting the environment as it carries out its multiple use objectives? Would you say very committed, somewhat committed, only a little committed, or not at all committed?

Line	Staff	(In percent)
68	56	1. Very committed
28	37	2. Somewhat committed
4	6	3. Only a little committed
0	1	4. Not at all committed
0	0	8. Don't know

The Forest Service has indicated that its multiple use policy for the future will be to enhance recreation, wildlife, fisheries, soil, and Water resource programs. Timber harvesting and livestock grazing will be maintained at their current levels, while access for minerals development will be increased where that can be accomplished in an environmentally acceptable manner.

B5. Is the proposed policy on multiple use different from the policies over the past 10 years? (Do not probe "don't know")

Line	Staff	(In percent)
72	73	1. Yes
27	21	2. No —> B6
1	7	8. Don't know —> B6

B5a. On the whole, how does the proposed policy compare to the policies over the past 10 years? Is it much better, somewhat better, somewhat worse or much worse?

Line	Staff	(In percent)
29	20	1. Much better
40	46	2. Somewhat better
27	21	Not different
3	5	3. Somewhat worse
0	1	4. Much worse
1	7	8. Don't know

B6. How likely is it that the Forest Service will follow through on this policy — would you say very likely, somewhat likely, somewhat unlikely, or very unlikely?

Line	Staff	(In percent)
40	37	1. Very Likely
42	46	2. Somewhat Likely
12	11	3. Somewhat unlikely
6	5	4. Very unlikely
1	1	8. Don't know

SECTION C

Now I'd like to ask you about some of the issues currently facing the Forest Service.

Biological diversity is the overall variety of life in an area, including all life forms and their ecosystems. Loss of natural diversity of life on Earth may affect environmental quality and human life.

The Forest Service has indicated that it will increase its role in developing knowledge, implementing conservation measures and demonstrating management approaches that will conserve specific elements of biological diversity.

C1. In general, how serious a problem do you personally think the loss of biological diversity is? Is it a very serious problem, somewhat serious, only a little serious, or not a problem at all?

Line	Staff	(In percent)
37	48	1. Very serious
43	37	2. Somewhat serious
16	11	3. Only a little serious
4	4	4. Not a problem
1	0	8. Don't know

C2. How committed do you think the Forest Service is to conserving biological diversity? (Would you say very committed, somewhat committed, only a little committed, or not at all committed?)

Line	Staff	(In percent)
40	33	1. Very committed
48	51	2. Somewhat committed
11	14	3. Only a little committed
1	1	4. Not at all committed
0	0	8. Don't know

C3. Is the stated Forest Service policy on biological diversity different from the policies over the past 10 years? (Do not probe "don't know")

Line	Staff	(In percent)
87	80	1. Yes
11	11	2. No —> C3b
2	9	8. Don't know —> C3b

C3a. On the whole, how does the proposed policy compare to the policies over the past 10 years? Is it much better, somewhat better, somewhat worse or much worse?

Line	Staff	(In percent)
46	29	1. Much better
40	48	2. Somewhat better
11	11	Not different
1	1	3. Somewhat worse
0	1	4. Much worse
2	10	8. Don't know

C3b. How likely is it that the Forest Service will follow through on this policy — would you say very likely, somewhat likely, somewhat unlikely, or very unlikely?

Line	Staff	(In percent)
43	36	1. Very likely
49	52	2. Somewhat likely
6	8	3. Somewhat unlikely
2	2	4. Very unlikely
0	2	8. Don't know

C4. The Forest Service has indicated the intent to manage riparian areas, that is wetlands and streamsides, in order to reduce impacts on those areas. One way this would be accomplished is by strengthening standards and guidelines for activities that affect those areas, like mining, recreational use, and road construction and maintenance.

How serious a problem do you personally think impacts on riparian areas are — are they a very serious problem, somewhat serious, only a little serious, or not a problem at all?

Line	Staff	(In percent)
46	42	1. Very serious
41	42	2. Somewhat serious
11	12	3. Only a little serious
2	3	4. Not a problem
0	1	8. Don't know

C5. How committed do you think the Forest Service is to better management of riparian areas— very committed, somewhat committed, only a little committed, or not at all committed?

Line	Staff	(In percent)
62	48	1. Very committed
34	42	2. Somewhat committed
4	8	3. Only a little committed
1	1	4. Not at all committed
0	1	8. Don't know

C6. Is the stated Forest Service policy on managing riparian areas different from the policies over the past 10 years? (Do not probe "don't know")

Line	Staff	(In percent)
74	73	1. Yes
23	17	2. No —> C6b
3	11	8. Don't know —> C6b

[a] nec: not elsewhere classified
[b] nfs: not further specified

C6a. On the whole, how does the proposed policy compare to the policies over the past 10 years? (Is it much better, somewhat better, somewhat worse or much worse?)

Line	Staff	(In percent)
38	29	1. Much better
35	42	2. Somewhat better
23	17	Not different
0	1	3. Somewhat worse
0	0	4. Much worse
3	11	8. Don't know

C6b. How likely is it that the Forest Service will follow through on this policy (Would you say very likely, somewhat likely, somewhat unlikely, or very unlikely?

Line	Staff	(In percent)
57	48	1. Very likely
38	43	2. Somewhat likely
4	6	3. Somewhat unlikely
1	1	4. Very unlikely
0	2	8. Don't know

C7. The Forest Service has indicated that water quality will be maintained by using best management practices.

How serious a problem do you personally think maintaining water quality is? (Is it a very serious problem, somewhat serious, only a little serious, or not a problem at all?)

Line	Staff	(In percent)
44	62	1. Very serious
42	27	2. Somewhat serious
11	7	3. Only a little serious
2	4	4. Not a problem
0	1	8. Don't know

C8. How committed do you think the Forest Service is to maintaining water quality? (Would you say very committed, somewhat committed, only a little committed, or not at all, committed?)

Line	Staff	(In percent)
56	46	1. Very committed
38	47	2. Somewhat committed
6	6	3. Only a little committed
1	1	4. Not at all committed
0	0	8. Don't know

C9. Is the stated Forest Service policy on maintaining water quality different from the policies over the past 10 years? (Do not probe "don't know")

Line	Staff	(In percent)
44	57	1. Yes
53	32	2. No —> C9b
4	11	8. Don't know —> C9b

C9a. On the whole, how does the proposed policy compare to the policies over the past 10 years? (Is it much better, somewhat better, somewhat worse or much worse?)

Line	Staff	(In percent)
16	19	1. Much better
28	36	2. Somewhat better
53	32	Not different
0	1	3. Somewhat worse
0	0	4. Much worse
4	12	8. Don't know

C9b. How likely is it that the Forest Service will follow through on this policy — would you say very likely, somewhat likely, somewhat unlikely, or very unlikely?

Line	Staff	(In percent)
54	45	1. Very likely
41	48	2. Somewhat likely
4	5	3. Somewhat unlikely
1	1	4. Very unlikely
0	1	8. Don't know

C10. The Forest Service has indicated that research on global climate change will be expanded in an effort to better understand the effects on forests, rangelands and related ecosystems. The agency will also take a leadership role in developing technologies to reduce any damages caused by global climate change.

How serious a problem do you personally think global climate change is? (Is it a very serious problem, somewhat serious, only a little serious, or not a problem at all?)

Line	Staff	(In percent)
25	44	1. Very serious
43	34	2. Somewhat serious
22	13	3. Only a little serious
8	6	4. Not a problem
2	3	8. Don't know

C11. How committed do you think the Forest Service is to researching and developing new technologies to reduce the effects of global climate change? (Would you say very committed, somewhat committed, only a little committed, or not at all committed?)

Line	Staff	(In percent)
23	20	1. Very committed
52	47	2. Somewhat committed
22	24	3. Only a little committed
1	5	4. Not at all commited
2	4	8. Don't know

C12. Is the stated Forest Service policy on global climate change different from the policies over the past 10 years? (Do not probe "don't know")

Line	Staff	(In percent)
92	73	1. Yes
5	12	2. No —> C12b
4	16	8. Don't know —> C12b

C12a. On the whole, how does the proposed policy compare to the policies over the past 10 years? (Is it much better, somewhat better, somewhat worse or much worse?)

Line	Staff	(In percent)
43	26	1. Much better
45	44	2. Somewhat better
5	12	Not different
1	1	3. Somewhat worse
1	0	4. Much worse
6	17	8. Don't know

C12b. How likely is it that the Forest Service will follow through on this policy — would you say very likely, somewhat likely, somewhat unlikely, or very unlikely?

Line	Staff	(In percent)
25	27	1. Very likely
53	49	2. Somewhat unlikely
16	15	3. Somewhat unlikely
5	6	4. Very unlikely
2	4	8. Don't know

C13. The Forest Service has indicated that it will manage wilderness and its various uses and activities so as to protect and enhance its wilderness character.

How serious a problem do you personally think threats to wilderness areas are? (Are they a very serious problem, somewhat serious, only a little serious, or not a problem at all?)

Line	Staff	(In percent)
18	29	1. Very serious
40	36	2. Somewhat serious
29	22	3. Only a little serious
13	13	4. Not a problem
0	0	8. Don't know

C14. How committed do you think the Forest Service is to protecting wilderness areas? (Would you say very committed, somewhat committed, only a little committed, or not at all committed?)

Line	Staff	(In percent)
66	63	1. Very committed
30	31	2. Somewhat committed
4	5	3. Only a little committed
0	1	4. Not at all committed
0	0	8. Don't know

[a] nec: not elsewhere classified
[b] nfs: not further specified

C15. Is the stated Forest Service policy on managing wilderness different from the policies over the past 10 years? (Do not probe "don't know")

Line	Staff	(In percent)
31	43	1. Yes
67	50	2. No —> C15b
2	7	8. Don't know —> C15b

C15a. On the whole, how does the proposed policy compare to the policies over the past 10 years? (Is it much better, somewhat better, somewhat worse or much worse?)

Line	Staff	(In percent)
10	16	1. Much better
20	25	2. Somewhat better
67	50	Not different
1	1	3. Somewhat worse
0	0	4. Much worse
2	8	8. Don't know

C15b. How likely is it that the Forest Service will follow through on this policy — would you say very likely, somewhat likely, somewhat unlikely, or very unlikely?

Line	Staff	(In percent)
65	62	1. Very likely
30	31	2. Somewhat likely
4	4	3. Somewhat unlikely
1	2	4. Very unlikely
1	1	8. Don't know

C16. The Forest Service has indicated that it is committed to programs which will identify and respond to the changing recreational needs of the public.

In the future, how much emphasis do you personally think should be placed on meeting the recreational needs of the public? Would you say much more than now, somewhat more than now, somewhat less than now, or much less than now?

Line	Staff	(In percent)
51	45	1. Much more than now
47	51	2. Somewhat more than now
2	3	3. Somewhat less than now
0	1	4. Much less than now
1	1	8. Don't know

C17. How committed do you think the Forest Service is to meeting the recreational needs of the public? (Would you say very committed, somewhat committed, only a little committed, or not at all committed?)

Line	Staff	(In percent)
50	48	1. Very committed
44	42	2. Somewhat committed
6	9	3. Only a little commited
0	1	4. Not at all commited
0	0	8. Don't know

C18. Is the stated Forest Service policy on recreation different from the policies over the past 10 years? (Do not probe "don't know")

Line	Staff	(In percent)
66	67	1. Yes
32	26	2. No —> C18b
2	7	8. Don't know —> C18b

C18a. On the whole, how does the proposed policy compare to the policies over the past 10 years? (Is it much better, somewhat better, somewhat worse or much worse?)

Line	Staff	(In percent)
28	26	1. Much better
37	39	2. Somewhat better
32	26	Not different
1	2	3. Somewhat worse
0	0	4. Much worse
2	7	8. Don't know

C18b. How likely is it that the Forest Service will follow through on this policy -- would you say very likely, somewhat likely, somewhat unlikely, or very unlikely?

Line	Staff	(In percent)
42	49	1. Very likely
49	43	2. Somewhat likely
6	6	3. Somewhat unlikely
1	2	4. Very unlikely
1	1	8. Don't know

C19. The Forest Service has indicated a commitment to recovering and protecting threatened, endangered, and sensitive species.

In general, how serious a problem do you personally think the loss of threatened, endangered and sensitive species is? (Is it a very serious problem, somewhat serious, a little serious, or not a problem at all?)

Line	Staff	(In percent)
41	45	1. Very serious
41	34	2. Somewhat serious
16	16	3. Only a little serious
2	5	4. Not a problem
0	0	8. Don't know

C20. How committed do you think the Forest Service is to recovering and protecting threatened, endangered, and sensitive species? (Would you say very committed, somewhat committed, only a little committed, or not at all committed?)

Line	Staff	(In percent)
64	55	1. Very committed
31	36	2. Somewhat committed
4	8	3. Only a little committed
1	1	4. Not at all committed
0	0	8. Don't know

C21. Is the stated Forest Service policy on threatened, endangered, and sensitive species different from the policies over the past 10 years? (Do not probe "don't know")

Line	Staff	(In percent)
56	68	1. Yes
43	27	2. No —> C21b
2	5	8. Don't know —> C21b

C21a. On the whole, how does the proposed policy compare to the policies over the past 10 years? (Is it much better, somewhat better, somewhat worse or much worse?)

Line	Staff	(In percent)
24	28	1. Much better
29	34	2. Somewhat better
43	27	Not different
3	3	3. Somewhat worse
1	2	4. Much worse
2	6	8. Don't know

C21b. How likely is it that the Forest Service will follow through on this policy -- would you say very likely, somewhat likely, somewhat unlikely, or very unlikely?

Line	Staff	(In percent)
66	57	1. Very likely
29	35	2. Somewhat likely
4	6	3. Somewhat unlikely
1	2	4. Very unlikely
0	1	8. Don't know

C22. Do you think there are any further actions the forest service should be taking regarding threatened and endangered species?

Line	Staff	(in percent)
57	47	1. Yes
42	50	2. No —> C23
1	3	8. Don't know —> C23

a nec: not elsewhere classified
b nfs: not further specified

C22a. What further actions (do you think the Forest Service should be taking regarding threatened and endangered species)?

Research

Line	Staff	(In percent)
14.2	9.8	2. More research; better understanding of problems/implications
13.9	8.3	7. Inventory; monitor; identify species
.4	.7	13. List should be monitored and updated

Planning

Line	Staff	(In percent)
3.3	2.4	3. Better programs/planning; define procedures; use scientific information on species and habitat
5.9	2.5	9. Coordination among units/agencies
1.4	1.8	10. Social and ethical factors considered in decision-making; local economies
.3	.0	11. Regional guidelines/standards
1.0	1.0	20. Planning, nec[a], nfs[b]

Better Management Practices

Line	Staff	(In percent)
4.4	1.5	22. Proactive — anticipate/plan for species before they become threatened
.8	.1	25. Land acquisition; conservation rights of way; coordinated planning on adjacent land
.5	.6	28. Support/funding for staff on the ground
.5	.7	31. Stewardship; leadership role
.8	.7	40. Management, nec, nfs
.6	1.2	84. Hire/work with more diverse staff —botanist wildlife biologists, etc.

Resource Balance

Line	Staff	(In percent)
8.1	3.3	21. Manage for all/entire ecosystem, not for single species; holistic approach
.8	.7	32. Protecting/maintaining biodiversity
.5	.2	33. Environmental concerns
.6	1.2	41. Higher priority to T&E, wildlife
1.3	.5	42. Mentioned more emphasis on specific species — smaller animals, birds, plants, etc.
2.2	4.1	43. Decrease emphasis on commodities/production —timber, logging, range
.8	.8	44. Proper balance between T&E and other resources/uses
.1	.9	46. Increased emphasis on wilderness, old growth
.8	1.0	50. Resource balance, nec[a], nfs[b]

Better Protection

Line	Staff	(In percent)
5.2	5.6	23. More aggressive protection/more committed to improvement of habitat
1.5	1.9	26. Increased commitment to recovery
.4	1.5	27. Exclude or limit certain uses on sensitive lands —roads, timber, grazing
1.5	4.2	30. Better/faster implementation of policy, laws; better enforcement

Better Public Relations

Line	Staff	(In percent)
.8	1.6	62. Educate/inform the public
.1	.6	70. Public relations, nec[a], nfs[b]

Political Problems

Line	Staff	(In percent)
5.0	3.3	71. Need for increased funding
.7	.8	72. Less bowing to political/commodity pressure
1.2	.4	73. Re-examine/change current laws
.9	1.3	74. Manage for good stewardship despite pressures
.8	.6	80. Political, nec[a], nfs[b]

Internal Problems

Line	Staff	(In percent)
1.2	.9	81. Need more/better people; training for staff
.0	.1	82. Personnel problems — underpaid, morale, highwork loads
.2	.0	86. Lack of/poor leadership
.5	.3	89. Internal, nec[a], nfs[b]

Less/Same Level of Protection

Line	Staff	(In percent)
.1	.4	39. Continue current policies; doing a good job
.0	.1	91. Let nature manage the forest

Other

Line	Staff	(In percent)
1.3	1.9	97. Other
.4	1.7	98. Don't know

C23. The Forest Service has indicated a commitment to improve the conditions of rangelands through better management techniques, and to change use on rangelands where that is needed to improve the land, including the reduction or elimination of livestock grazing.

How serious a problem do you personally think the condition of national Forest rangelands is? (Is it a very serious problem, somewhat serious, only a little serious, or not a problem at all?)

Line	Staff	(In percent)
35	31	1. Very serious
47	39	2. Somewhat serious
12	14	3. Only a little serious
2	8	4. Not a problem
3	8	8. Don't know

C24. How committed do you think the Forest Service is to improving the condition of rangelands? (Would you say very committed, somewhat committed, only a little committed, or not at all committed?)

Line	Staff	(In percent)
31	23	1. Very committed
49	51	2. Somewhat committed
15	19	3. Only a little committed
2	4	4. Not at all committed
2	4	8. Don't know

C25. Is the stated Forest Service policy on rangelands different from the policies over the past 10 years? (Do not probe "don't know")

Line	Staff	(In percent)
49	45	1. Yes
43	36	2. No —> C25b
8	19	3. Don't know —> C25b

C25a. On the whole, how does the proposed policy compare to the policies over the past 10 years? (Is it much better, somewhat better, somewhat worse or much worse?)

Line	Staff	(In percent)
20	13	1. Much better
28	29	2. Somewhat better
43	36	Not different
1	2	3. Somewhat worse
0	1	4. Much worse
8	20	8. Don't know

C25b. How likely is it that the Forest Service will follow through on this policy -- would you say very likely, somewhat likely, somewhat unlikely, or very unlikely?

Line	Staff	(In percent)
24	29	1. Very likely
50	46	2. Somewhat likely
18	14	3. Somewhat unlikely
5	6	4. Very unlikely
4	6	8. Don't know

C26. Do you think there are any further actions the Forest Service should be taking regarding the condition of rangelands?

Line	Staff	(In percent)
65	50	1. Yes
30	39	2. No —> C27
5	11	8. Don't know —> C27

C26a What further actions (do you think the Forest Service should be taking regarding the condition of rangelands)?

Research

Line	Staff	(In percent)
4.7	3.9	2. More research; better understanding of problems/implications
4.3	4.2	7. Inventory/monitor rangelands/grazing

[a] nec: not elsewhere classified
[b] nfs: not further specified

Planning

Line	Staff	(In percent)
4.8	2.4	3. Update/improve allotment/range management plans; better planning
1.1	.5	6. Coordination among units/forests, adjacent lands
.7	.3	10. Social and ethical factors considered indecision-making; local economies
2.4	3.2	11. Stronger guidelines/standards; stronger enforcement
.5	.6	13. Change/improve policies
.7	.5	20. Planning, nec[a], nfs[b]

Increase Fees

Line	Staff	(In percent)
6.8	5.7	1. Increase fees

Manage

Line	Staff	(In percent)
4.0	1.9	31. Need more people in the field; better support/funding/training for people on the ground; more resources
1.0	.3	32. Follow recommendations of land managers/professionals
1.2	1.0	40. Management, nec[a], nfs[b]

Resource Balance

Line	Staff	(In percent)
2.3	1.1	21. Manage for all/entire ecosystem; holistic approach
7.0	5.8	29. Better protection/management of riparian areas
.5	.5	34. Mention of environment
1.5	2.2	36. Mention of Water, Watershed
.1	.2	37. Protecting/maintaining biodiversity
2.2	3.0	41. Competition between wildlife/natural species and grazing
.3	.5	42. Reintroduction of indigenous plants; increased emphasis on vegetation, native grasses
.4	.9	43. Competition between wilderness and grazing
.6	.1	44. Reduce/monitor impacts on other resources
.2	.1	45. Soil compaction/erosion control
.1	.2	60. Resource balance, nec[a], nfs[b]

Better Protection

Line	Staff	(In percent)
3.8	2.9	12. Monitor users; users need to be more responsible; educate permittees
10.2	6.7	24. Better/faster implementation of policy; stricter enforcement; improve management/stewardship
1.3	.0	27. Keep cattle allotments in line with good management; better control of allotments/carrying capacity
5.9	3.1	30. Better protection/maintenance/ improvement of rangelands

Decrease Use

Line	Staff	(In percent)
3.2	2.9	08. Reduce/monitor number of permits and length
10.5	12.2	28. Reduce current levels of grazing/cattle; eliminate grazing where necessary
1.5	1.4	35. Eliminate year-long grazing, reduce season, reduce AUMs
1.5	2.4	91. Eliminate grazing permits altogether —let rangelands revert to natural ecosystem

Public Relations

Line	Staff	(In percent)
.5	.5	61. Do what public wants, encourage public involvement/input
2.0	.9	62. Publicize good management practices; publicize the problem; communicate with public
.2	.0	70. Public relations, nec[a], nfs[b]

Political

Line	Staff	(In percent)
12.0	3.3	71. Increased funding
2.8	1.7	72. Less bowing to commodity group pressure; stop subsidizing grazing interests
2.2	.8	73. Less bowing to political/Congressional pressures; get politics out
.3	.5	74. Forest Service should work to obtain support for programs/policies
.6	1.0	75. Political/Congressional interference,pressure
1.1	1.1	77. Put good stewardship ahead of politics
.3	.0	80. Political, nnec[a], nfs[b]

Other

Line	Staff	(In percent)
1.6	2.6	97. Other
.6	1.1	98. Don't know

C27. The Forest Service has indicated that in some areas old-growth forests on National Forest System lands will be protected. In other areas, old growth values will be one of the factors considered in management decisions.

How serious a problem do you personally think the loss of old-growth forests is? (Is it a very serious problem, somewhat serious, only a little serious, or not a problem at all?)

Line	Staff	(In percent)
34	44	1. Very serious
42	35	2. Somewhat serious
17	13	3. Only a little serious
7	8	4. Not a problem
1	1	8. Don't know

C28. How committed do you think the Forest Service is to protecting old-growth forests? (Would you say very committed, somewhat committed, only a little committed, or not at all committed?)

Line	Staff	(In percent)
34	34	1. Very committed
53	47	2. Somewhat committed
10	15	3. Only a little committed
2	3	4. Not at all committed
0	1	8. Don't know

C29. Is the stated Forest Service policy on old-growth forests different from the policies over the past 10 years? (Do not probe "don't know")

Line	Staff	(In percent)
89	78	1. Yes
9	15	2. No —> C29b
2	7	8. Don't know —> C29b

C29a. On the whole, how does the proposed policy compare to the policies over the past 10 years? (Is it much better, somewhat better, somewhat worse or much worse?)

Line	Staff	(In percent)
37	26	1. Much better
47	46	2. Somewhat better
9	15	Not different
4	4	3. Somewhat worse
1	2	4. Much worse
3	8	8. Don't know

C29b. How likely is it that the Forest Service will follow through on this policy — would you say very likely, somewhat likely, somewhat unlikely, or very unlikely?

Line	Staff	(In percent)
53	48	1. Very likely
39	41	2. Somewhat likely
5	7	3. Somewhat unlikely
2	4	4. Very unlikely
1	1	8. Don't know

C30. Do you think there are any further actions the Forest Service should be taking regarding old growth forests?

Line	Staff	(In percent)
58	50	1. Yes
41	45	2. No —> C31
2	5	8. Don't know —> C31

C30a. What further actions (do you think the Forest Service should be taking regarding old growth forests)?

Research

Line	Staff	(In percent)
12.4	8.1	01. More research; better understanding of problems/implications
10.7	4.8	03. Develop better definition of old growth
12.4	6.3	07. Inventory/identify/monitor old growth

[a] nec: not elsewhere classified
[b] nfs: not further specified

Better Planning

Line	Staff	(In percent)	
.2	.5	02.	Consider economic/human factors; local economies
4.9	3.5	04.	Develop overall manag. plan for old growth; old growth needs to be serious component of forest plans
.4	.4	05.	Be sensitive to long-range impacts; future generations
.6	.8	06.	Coordination among units/forests, adjacent lands
1.2	.5	09.	Agency/Congress determine what level should be retained
.8	.2	10.	Consider social and ethical factors in decision-making
.4	.1	11.	Develop stronger guidelines/standards
3.0	.7	13.	Implement regional/zone planning; different for each area
.7	1.0	15.	Recognize value of old-growth, not just economics
1.2	1.2	20.	Planning, nec[a], nfs[b]

Improved Management Practices

Line	Staff	(In percent)	
.7	.2	08.	Provide clearer leadership mandate; decide on policy
.6	.2	22.	Be proactive, on top of situation
.4	.2	27.	More varied technical staff, better educated, bigger staff
.7	.4	32.	Follow recommendations of land managers/professionals — e.g., wildlife biologists
.0	.5	36.	More involvement by top level staff
.5	.3	37.	Positive mentions of role of fire
.2	.7	40.	Management, nec[a], nfs[b]
.0	.8	42.	Decrease clearcutting, selective cut

Better Resource Balance

Line	Staff	(In percent)	
5.1	3.6	21.	Manage for all/entire ecosystem; holistic approach
1.0	.2	38.	Protecting/maintaining biodiversity
.4	1.1	41.	Increase emphasis on wilderness; move areas of old growth to wilderness designation
2.5	3.4	43.	Decrease timber harvest/targets; adjust ASQs (allowable sales quantities)
.9	1.1	44.	Better balance between production and protection
.1	.5	50.	Resource balance, nec, nfs
.0	.1	51.	Work with environmentalists/groups
.2	.2	60.	Environment, nec[a], nfs[b]

Better Protection

Line	Staff	(In percent)	
1.8	2.3	14.	Identify and set aside areas for protection
2.5	2.4	23.	Set aside lands to grow old growth; develop older trees; increase rotation length; replace old growth
1.5	.8	24.	Better/faster implementation of policy; stricter enforcement
4.4	6.3	26.	Increased commitment to protecting/maintaining old growth
.8	1.0	31.	Reduce fragmentation
.2	.2	33.	Buy/acquire old growth stands that are not on Forest Service land
2.1	7.0	35.	Preserve all remaining old growth

Decrease Emphasis

Line	Staff	(In percent)	
.2	.4	28.	Need to clean up old growth forests —firehazard, unhealthy trees
.1	.1	30.	Emphasize/maintain multiple use policies
.0	.1	34.	Continue what is being done now
.2	.2	45.	Maintain commodity outputs
2.2	2.8	90.	Shouldn't be so restrictive; old growth can't/shouldn't all be saved; old growth should be treated as a resource

Public Relations

Line	Staff	(In percent)	
8	9	61.	Do what public wants
3.3	1.6	63.	Educate public; issue is becoming too emotional
.6	.6	64.	Encourage public participation, better communication, dialogue

Political

Line	Staff	(In percent)	
.7	.4	71.	Increased funding
1.1	1.6	72.	Less bowing to commodity group/political/interest group pressure
.4	.2	73.	Need to balance competing demands/pressures
.2	.4	74.	Need new laws, legislation
1.2	.9	75.	Good stewardship despite pressures, less interference
.2	.1	80.	Political, nec[a], nfs[b]

Other

Line	Staff	(In percent)	
1.4	.4	97.	Other
.2	1.0	98.	Don't know

C31. The Forest Service has indicated that it intends to take steps to reduce below-cost timber sales in the national Forests — sales where revenues from commercial timber sales are lower than costs.

Do you think that in some cases below-cost timber sales are justified?

Line	Staff	(In percent)	
91	67	1.	Yes
7	26	2.	No
1	4	3.	Depends/maybe (do not read)
1	3	8.	Don't know

C32. Do you think there are too many below-cost timber sales in the national Forests?

Line	Staff	(In percent)	
57	54	1.	Yes
34	33	2.	No —> C33
9	13	8.	Don't know —> C33

C32a. How serious a problem do you personally think below-cost timber sales are — very serious, somewhat serious, or only a little serious?

Line	Staff	(In percent)	
14	22	1.	Very serious
26	24	2.	Somewhat serious
16	8	3.	Only a little serious
34	33	4.	Not a problem
9	13	8.	Don't know

C33. How committed do you think the Forest Service is to reducing below-cost timber sales? (Would you say very committed, somewhat committed, only a little committed, or not at all committed?)

Line	Staff	(In percent)	
29	23	1.	Very committed
50	44	2.	Somewhat committed
16	23	3.	Only a little committed
4	5	4.	Not at all committed
2	6	8.	Don't know

C34. Is the stated Forest Service policy on reducing below-cost timber sales different from the policies over the past 10 years? (Do not probe "don't know")

Line	Staff	(In percent)	
81	62	1.	Yes
16	24	2.	No —> C34b
3	14	8.	Don't know —> C34b

C34a. On the whole, how does the proposed policy compare to the policies over the past 10 years? (Is it much better, somewhat better, somewhat worse or much worse?)

Line	Staff	(In percent)	
19	12	1.	Much better
50	42	2.	Somewhat better
16	24		Not different
8	5	3.	Somewhat worse
2	2	4.	Much worse
5	15	8.	Don't know

C34b How likely is it that the Forest Service will follow through on this policy — would you say very likely, somewhat likely, somewhat unlikely, or very unlikely?

Line	Staff	(In percent)	
39	31	1.	Very likely
47	45	2.	Somewhat likely
9	14	3.	Somewhat unlikely
4	5	4.	Very unlikely
1	5	8.	Don't know

[a] nec: not elsewhere classified
[b] nfs: not further specified

C35. Do you think there are any further actions the Forest Service should be taking regarding below-cost timber sales?

Line	Staff	(In percent)
59	50	1. Yes
39	43	2. No —> C36
2	7	8. Don't know —> C36

C35a. What further actions (do you think the Forest Service should be taking regarding below-cost timber sales)?

Research

Line	Staff	(In percent)	
6.6	4.4	02.	More research, better definition of what below cost sales are and when they are justified, goals of a particular sale

Better Planning

Line	Staff	(In percent)	
.4	.7	03.	Understand role of foreign sales
1.3	.4	05.	Sensitivity to long-range impacts/benefits; future generations
.2	.1	08.	Simplify regulations, plan revision process
.5	.3	12.	Stronger guidelines/standards
1.1	.3	14.	Regional planning/implementation
2.4	2.2	15.	Assess economic effects on local/national economy, outlying communities; social and ethical considerations in planning
.0	.4	19.	Forest Service should not be managing for people's jobs; should not be concerned with economy, local or national
2.9	2.7	20.	Planning, nec[a], nfs[b]

Management Practices

Line	Staff	(In percent)	
3.2	1.4	09.	Clearer leadership mandate; clearer/better policy
.0	1.1	23.	Stop building roads
1.0	.2	40.	Management, nec[a], nfs[b]

Resource Balance

Line	Staff	(In percent)	
.6	.2	21.	Manage for all/entire ecosystem; holistic approach
1.9	1.3	41.	Reduce/reevaluate all timber sales/targets
.6	.2	50.	Resource balance, nec[a], nfs[b]
.2	.3	51.	Environment should be considered in management decisions
.2	.5	60.	Environment, nec[a], nfs[b]

Increased Commitment to Reducing Below Cost Sales

Line	Staff	(In percent)	
.8	1.5	24.	Better/faster implementation of policy; stricter enforcement
3.0	4.2	26.	Increased commitment to reducing below cost timber sales
1.6	7.5	90.	Eliminate below cost sales; stop subsidizing timber industry

Increase Revenues

Line	Staff	(In percent)	
2.4	2.7	10.	Cut costs; decrease workforce; increase efficiency
.2	.3	11.	Delay sales to show profit
3.6	3.8	17.	Increased revenues, minimum appraisal values; make sure sale pays for itself

Better Accounting

Line	Staff	(In percent)	
8.5	4.6	06.	Better accounting system; economic analysis
11.1	4.2	07.	Better documentation/explanation of benefits; determine value for non-commodity items, values, other resources
.7	.9	13.	Costs for services provided shared with other units —e.g., costs of road building shared recreation, hunting, wildlife, etc.
.2	.2	16.	Better implementation/use of TSPIRS
.6	.1	18.	Eliminate/improve/change TSPIRS

Decrease Emphasis

Line	Staff	(In percent)	
.7	.5	01.	Deemphasize below cost; other resources operation below cost
2.2	.6	04.	Profit is not part of Forest Service mandate; economics shouldn't be so important
5.9	3.1	27.	Below cost timber sales should be maintained when necessary to benefit other resources, stop disease, reduce fire risk; management tool
.2	.6	52.	Sometimes environmentally correct management results in increased costs, below-cost timber sales

Public Relations

Line	Staff	(In percent)	
12.6	4.4	61.	Educate/inform public/Congress; explain benefits of/need for below cost sales
.2	1.2	62.	Do/identify what public wants, encourage public participation
.1	.2	70.	Public relations, nec[a], nfs[b]

Political

Line	Staff	(In percent)	
.3	.2	71.	Increase funding
1.1	1.4	72.	Less bowing to commodity group/political pressure; less interference, defend policy
.6	.3	73.	Meeting targets causes/magnifies problem
.5	.3	74.	Need new laws, legislation
1.5	.9	80.	Political, nec[a], nfs[b]f

Other

Line	Staff	(In percent)	
1.6	1.0	97.	Other
.7	2.3	98.	Don't know

C36. The Forest Service has indicated that clearcutting in national Forests will be reduced and alternative harvest methods will be pursued.

Do you think clearcutting is an acceptable management practice?

Line	Staff	(In percent)
85	60	1. Yes
4	27	2. No
11	12	3. Depends/maybe (do not read)
1	1	8. Don't know

C37. Do you think there is too much clearcutting in the National Forests?

Line	Staff	(In percent)
73	67	1. Yes
24	30	2. No —> C38
4	3	8. Don't know —> C38

C37a. How serious a problem do you personally think clearcutting is? (Is it very serious, somewhat serious, or only a little serious?)

Line	Staff	(In percent)
23	30	1. Very serious
31	26	2. Somewhat serious
18	10	3. Only a little serious
24	30	Not a problem
1	0	8. Don't know

C38. How committed do you think the Forest Service is to reducing clearcutting? (Would you say very committed, somewhat committed, only a little committed, or not at all committed?)

Line	Staff	(In percent)
52	37	1. Very committed
40	47	2. Somewhat committed
6	12	3. Only a little committed
2	2	4. Not at all committed
1	3	8. Don't know

C39. Is the stated Forest Service policy on clearcutting different from the policies over the past 10 years? (Do not probe "don't know")

Line	Staff	(In percent)
83	78	1. Yes
15	15	2. No —> C40
2	7	8. Don't know

C39a. On the whole, how does the proposed policy compare to the policies over the past 10 years? (Is it much better, somewhat better, somewhat worse or much worse?)

Line	Staff	(In percent)
30	24	1. Much better
42	45	2. Somewhat better
15	15	Not different
8	5	3. Somewhat worse
2	3	4. Much worse
3	8	8. Don't know

[a] nec: not elsewhere classified
[b] nfs: not further specified

C40. How likely is it that the Forest Service will follow through on this policy? (Would you say — very likely, somewhat likely, somewhat unlikely or very unlikely?)

Line	Staff	(In percent)
61	52	1. Very likely
32	37	2. Somewhat likely
4	6	3. Somewhat unlikely
1	3	4. Very unlikely
1	2	8. Don't know

C41. Do you think there are any further actions the Forest Service should be taking regarding clearcutting?

Line	Staff	(In percent)
57	51	1. Yes
41	45	2. No —> D1.1
1	4	8. Don't know

C41a. What further actions (do you think the Forest Service should be taking regarding clearcutting)?

Research

Line	Staff	(In percent)
6.1	5.0	01. More research on acceptability/clearer definition of clearcutting —where it should or shouldn't be done; environmental/ecological impacts, optimal size
6.9	2.9	02. More research into other methods; clearcutting vs other methods; more information/education on alternative methods
1.0	1.2	03. More research/emphasis on regeneration after clearcut
1.2	.9	16. More research, nec[a], nfs[b]

Planning

Line	Staff	(In percent)
.7	.3	05. Be sensitive to long-range impacts; future generations
1.3	.3	10. New Perspectives
.7	.9	13. Emphasize regional planning/implementation
.7	.0	14. Assess effects on local economy, outlying communities; social, ethical considerations
1.4	.7	15. Assess economic effects of not clearcutting —increase in cost of timber, increase in number of below cost sales; cost analysis
1.5	.6	20. Planning, nec[a], nfs[b]

Management Practices

Line	Staff	(In percent)
1.6	.8	08. Develop clearer leadership mandate; clearer/better policy
.1	.5	18. Make decisions on biological basis, not financial
1.0	1.2	23. Monitor clear cutting sites for environmental impacts, ecosystems
.8	1.0	24. Better/faster implementation of policy; stricter enforcement
.5	.6	32. Follow recommendations of land managers/professionals
.8	1.7	40. Management, nec[a], nfs[b]

Resource Balance

Line	Staff	(In percent)
2.4	.8	21. Manage for all/entire ecosystem; holistic approach
1.7	1.6	41. Reduce/reevaluate timber sales, decrease targets
.2	.2	46. Increase emphasis on environment, environmental concerns
.6	1.1	60. Resource balance, nec[a], nfs[b]

Increase Use of Alternative Methods

Line	Staff	(In percent)
2.8	2.5	25. Reduce size of clearcut parcels; increase number of clearcuts, but reduce size
4.1	5.4	26. Increase commitment to reducing clearcutting
2.5	1.6	27. Better clearcut methods; e.g., shape clearcuts to fit in better with natural landscapes, make clearcuts more aesthetically pleasing, better harvesting techniques
1.0	.5	28. Uneven aged management
4.8	6.3	29. Consider alternative methods; match method to needs of land
1.6	1.7	30. Use clearcutting only when no other way
.7	5.8	90. Ban clearcutting

Retain Use of Clearcutting

Line	Staff	(In percent)
6.7	4.1	09. Retain clearcutting as a management tool; change policy to reflect that
.4	.8	91. Increase the use of clearcutting; don't limit clearcutting

Public Relations

Line	Staff	(In percent)
.1	.2	17. Understand that a decrease in clearcutting will lead to a decrease in timber output
17.9	9.0	61. Educate public/Congress; explain benefits of/need for clearcutting
.8	1.3	62. Listen to public, do what public wants, encourage public involvement
.7	.5	70. Public relations, nec[a], nfs[b]

Political

Line	Staff	(In percent)
.7	.2	71. Increased funding
.1	.3	72. Give in less to Congressional/commodity pressure
.4	.4	73. Give in less to public/special interest group pressure
.5	.3	74. Defend clearcutting, policy
.9	1.3	75. Professional management, stewardship, despite pressures
.2	.9	80. Political, nec[a], nfs[b]

Other

Line	Staff	(In percent)
.9	.4	97. Other
.3	1.8	98. Don't know

SECTION D

Now I'd like to ask you a few questions about Forest Service management and planning in general.

Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with the following statements:

D1.1 First, The Forest Service is responsive to public needs in determining multiple use objectives and priorities. (Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?)

Line	Staff	(In percent)
42	32	1. Strongly agree
50	56	2. Somewhat agree
0	0	3. Neither agree nor disagree (do not read)
7	10	4. Somewhat disagree
2	2	5. Strongly disagree
0	0	8. Don't know

D1.2 The next statement is: It is more important to manage Forest Service lands for local employment than for environmental quality. (Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?)

Line	Staff	(In percent)
1	5	1. Strongly agree
10	20	2. Somewhat agree
2	2	3. Neither agree nor disagree (do not read)
37	30	4. Somewhat disagree
50	43	5. Strongly disagree
1	1	8. Don't know
0	0	9. Not applicable

D 1.3 (The next statement is:) In order to reduce multiple use conflicts, the Forest Service should consider shifting to single or dual uses in some areas. (Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?)

Line	Staff	(In percent)
19	22	1. Strongly agree
38	48	2. Somewhat agree
1	1	3. Neither agree nor disagree (do not read)
16	13	4. Somewhat disagree
26	13	5. Strongly disagree
1	3	8. Don't know

[a] nec: not elsewhere classified
[b] nfs: not further specified

D1.4 **(The next statement is:) The agency should place less emphasis on multiple use development and more emphasis on preservation. (Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?)**

Line	Staff	(In percent)
4	13	1. Strongly agree
14	25	2. Somewhat agree
1	1	3. Neither agree nor disagree (do not read)
27	28	4. Somewhat disagree
54	31	5. Strongly disagree
0	2	8. Don't know

D1.5 **(The next statement is:) Under current levels of use, it will be difficult to sustain resource capabilities for future generations. (Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?)**

Line	Staff	(In percent)
25	34	1. Strongly agree
28	29	2. Somewhat agree
1	1	3. Neither agree nor disagree (do not read)
23	22	4. Somewhat disagree
23	14	5. Strongly disagree
1	1	8. Don't know

D1.6 **(The next statement is:) Timber harvesting is usually the best way to enhance other multiple uses. (Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?)**

Line	Staff	(In percent)
8	9	1. Strongly agree
30	29	2. Somewhat agree
2	1	3. Neither agree nor disagree (do not read)
41	35	4. Somewhat disagree
20	25	5. Strongly disagree
0	1	8. Don't know

D1.7 **(The next statement is:) Local economic concerns play too large a role in making multiple use management decisions. (Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?)**

Line	Staff	(In percent)
13	21	1. Strongly agree
37	41	2. Somewhat agree
1	0	3. Neither agree nor disagree (do not read)
38	27	4. Somewhat disagree
11	10	5. Strongly disagree
1	1	8. Don't know

D1.8 **(The next statement is:) The Forest Service will be able to achieve its future multiple use objectives without harming the environment. (Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?)**

Line	Staff	(In percent)
28	17	1. Strongly agree
47	42	2. Somewhat agree
1	1	3. Neither agree nor disagree (do not read)
20	28	4. Somewhat disagree
5	11	5. Strongly disagree
1	1	8. Don't know

D1.9 **(The next statement is:) The Forest Service should place greater emphasis on modifying the management of national Forest areas to complement the management activities on adjacent lands. (Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?)**

Line	Staff	(In percent)
14	21	1. Strongly agree
43	45	2. Somewhat agree
2	1	3. Neither agree nor disagree (do not read)
25	21	4. Somewhat disagree
15	12	5. Strongly disagree
1	1	8. Don't know

D1.10 **(The next statement is:) International Forestry programs should receive increased emphasis. (Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?)**

Line	Staff	(In percent)
31	34	1. Strongly agree
46	46	2. Somewhat agree
1	1	3. Neither agree nor disagree (do not read)
16	13	4. Somewhat disagree
5	4	5. Strongly disagree
1	2	8. Don't know

D1.11 **(The next statement is:) Generally, the Forest Service makes good faith efforts to put into action its publicly declared policies. (Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?)**

Line	Staff	(In percent)
58	43	1. Strongly agree
36	46	2. Somewhat agree
0	0	3. Neither agree nor disagree (do not read)
5	8	4. Somewhat disagree
1	3	5. Strongly disagree
0	1	8. Don't know

The following statements discuss various views relating to Forest Service management and planning. For each one, please tell me whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree.

D2.1 **In a democratic society, public preferences should ultimately prevail, even when they conflict with the judgment of resource professionals. (Do you strongly agree, somewhat agree, somewhat disagree or strongly disagree?)**

Line	Staff	(In percent)
13	7	1. Strongly agree
38	28	2. Somewhat agree
1	0	3. Neither agree nor disagree (do not read)
34	43	4. Somewhat disagree
15	22	5. Strongly disagree
0	1	8. Don't know

D2.2 **(The next statement is:) The demands of interest groups are usually not consistent with sound resource management. (Do you strongly agree, somewhat agree, somewhat disagree or strongly disagree?)**

Line	Staff	(In percent)
17	26	1. Strongly agree
44	45	2. Somewhat agree
1	1	3. Neither agree nor disagree (do not read)
33	24	4. Somewhat disagree
5	4	5. Strongly disagree
0	0	8. Don't know

D2.3 **(The next statement is:) Forest plan objectives are more important than Congressional intent for targets. (Do you strongly agree, somewhat agree, somewhat disagree or strongly disagree?)**

Line	Staff	(In percent)
48	44	1. Strongly agree
33	35	2. Somewhat agree
1	1	3. Neither agree nor disagree (do not read)
13	13	4. Somewhat disagree
5	6	5. Strongly disagree
1	2	8. Don't know

[a] nec: not elsewhere classified
[b] nfs: not further specified

D3. In a number of locations, the Forest Service, as part of its planning process, has facilitated face to face negotiation among interest groups so that planning decisions could be made by consensus.

Please tell me whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statement: Making planning decisions through this type of negotiation is a move in the right direction for the Forest Service.

Line	Staff	(In percent)
48	42	1. Strongly agree
40	45	2. Somewhat agree
0	0	3. Neither agree nor disagree (do not read)
9	8	4. Somewhat disagree
3	4	5. Strongly disagree
0	1	8. Don't know

D3a. Why do you feel that way (...that making planning decisions through face to face negotiation among interest groups so that planning decisions can be made by concensus is a move in the right direction?)

POSITIVE

More Support for Decisions

Line	Staff	(In percent)
5.3	1.9	01. Only way to get anything done; road blocks to action if not
25.4	23.1	02. Good way to get/gauge public opinion; need to work with public/get public involved; need to incorporate society's values
1.8	2.3	03. Better credibility; better relationship with public
4.9	5.3	04. Inform public, public can become better educated, have better understanding of issues
7.2	5.3	06. Land belongs to people
.4	.8	08. Involve people up front, before decision is made
9.1	5.3	22. All parties take ownership of outcome, broader support of decisions, improved implementation, cooperation, creates "win-win" situation; reduces conflict/problems later
5.0	3.9	24. Avoids litigation

More/Better Information

Line	Staff	(In percent)
21.8	30.8	11. Gets more input, everybody involved, introduces more options/ideas; better exchange of information
5.0	2.2	12. Creates better dialogue among groups, better understanding of opposing viewpoints
7.4	3.8	14. Better decisions/solutions
2.3	3.3	15. Dealing/working with actual users/interested parties; close to the ground
4.6	3.4	16. Encourages/forces compromise, informed consent, bargaining in good faith
1.4	1.0	25. Better chance for more people to benefit from decision

Better Process/Policies

Line	Staff	(In percent)
1.4	0.6	23. Saves time; more efficient
3.6	1.9	27. Has worked well, usually good
4.4	3.9	31. Responder believes in consensus management, important in a democratic society, "It's the right thing to do"
1.1	1.0	34. Leads to better resource balance, better forest management
9	1.2	40. Face-to-face negotiations always best, other positive comments, nec[a], nfs[b]

NEUTRAL

1.5	4.0	72. Process good but professionals need to make final decisions, best interests of forests most important
1.7	1.8	95. Depends

NEGATIVE

Unrepresentative

Line	Staff	(In percent)
8.1	6.4	41. Parties present may not be representative; people in middle may be ignored; decisions biased
.8	1.6	42. Too many groups, too much pressure, conflicting demands, too politicized
.6	.1	43. Lacks national perspective, need to balance national objectives
.7	1.6	51. Interest groups have too specialized interests

Bad Policies/Decisions

Line	Staff	(In percent)
1.7	2.9	52. Forest Service should make decisions based on professional judgement; diluting goals through compromise
3.9	2.7	53. Leads to poor decisions, not always sound professionally/technically, resources suffer
2.0	2.8	56. Input based on emotion, lacks scientific basis, don't consider long-term effects

Bad Process

Line	Staff	(In percent)
2.7	1.1	62. People won't compromise, confrontational, don't bargain in good faith, leads to problems later
1.4	.6	65. Takes up too much time
.9	.2	66. Increases costs
1.5	.6	67. Hasn't worked well
1.4	1.3	70. Negative comments, nec[a], nfs[b]
1.4	2.3	97. Other
.4	1.9	98. Don't know

Now I'm going to read you a list of groups. For each group I mention, I'd like you to tell me how much influence you feel that group has on Forest Service policy; whether it has far too much influence, too much influence, about the right amount ofinfluence, too little influence or far too little influence.

D4.1 First, what about Forest Service line officers. Do you think they have far too much influence, too much influence, about the right amount of influence, too little influence or far too little influence?

Line	Staff	(In percent)
1	6	1. Far too much influence
8	18	2. Too much influence
62	55	3. About right amount of influence
26	17	4. Too little influence
2	2	5. Far too little influence
1	2	8. Don't know
0	0	9. Not applicable

D4.2 How about Forest Service Staff? (Do you think they have far too much influence, too much influence, about the right amount of influence, too little influence or far too little influence?)

Line	Staff	(In percent)
2	2	1. Far too much influence
23	17	2. Too much influence
57	52	3. About right amount of influence
16	26	4. Too little influence
1	3	5. Far too little influence
0	1	8. Don't know
0	0	9. Not applicable

D4.3 (How about) commodity groups such as timber, grazing, or mining? (Do you think they have far too much influence, too much influence, about the right amount of influence, too little influence or far too little influence?)

Line	Staff	(In percent)
15	15	1. Far too much influence
61	45	2. Too much influence
21	28	3. About right amount of influence
3	9	4. Too little influence
0	1	5. Far too little influence
0	2	8. Don't know
0	0	9. Not applicable

D4.4 (How about) environmental groups? (Do you think they have far too much influence, too much influence, about the right amount of influence, too little influence or far too little influence?)

Line	Staff	(In percent)
12	18	1. Far too much influence
49	43	2. Too much influence
32	25	3. About right amount of influence
7	11	4. Too little influence
1	2	5. Far too little influence
0	1	8. Don't know
0	0	9. Not applicable

[a] nec: not elsewhere classified
[b] nfs: not further specified

D4.5 *(How about) the public?* **(Do you think they have far too much influence, too much influence, about the right amount of influence, too little influence or far too little influence?)**

Line	Staff	(In percent)
0	1	1. Far too much influence
2	4	2. Too much influence
26	33	3. About right amount of influence
60	49	4. Too little influence
11	12	5. Far too little influence
1	1	8. Don't know
0	0	9. Not applicable

D4.6 **(How about) key members of Congress? (Do you think they have far too much influence, too much influence, about the right amount of influence, too little influence or far too little influence?)**

Line	Staff	(In percent)
28	31	1. Far too much influence
51	48	2. Too much influence
19	15	3. About right amount of influence
2	4	4. Too little influence
0	1	5. Far too little influence
0	2	8. Don't know
0	0	9. Not applicable

D4.7 **(How about) the President and top level administration officials? (Do you think they have far too much influence, too much influence, about the right amount of influence, too little influence or far too little influence?)**

Line	Staff	(In percent)
13	17	1. Far too much influence
30	35	2. Too much influence
46	35	3. About right amount of influence
9	8	4. Too little influence
1	2	5. Far too little influence
1	3	8. Don't know

Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with the following statements.

D5.1 **There are limits to growth beyond which our industrialized society cannot expand. (Do you strongly agree, somewhat agree, somewhat disagree or strongly disagree?)**

Line	Staff	(In percent)
53	45	1. Strongly agree
38	40	2. Somewhat agree
0	0	3. Neither agree nor disagree (do not read)
6	10	4. Somewhat disagree
2	3	5. Strongly disagree
0	1	8. Don't know

D5.2 **Humans have the right to modify the natural environment to suit their needs. (Do you strongly agree, somewhat agree, somewhat disagree or strongly disagree?)**

Line	Staff	(In percent)
13	10	1. Strongly agree
54	40	2. Somewhat agree
1	0	3. Neither agree nor disagree (do not read)
20	24	4. Somewhat disagree
12	25	5. Strongly disagree
0	1	8. Don't know

D5.3 **(The next statement is:) Nature is resilient and readily recovers when disturbed. (Do you strongly agree, somewhat agree, somewhat disagree or strongly disagree?)**

Line	Staff	(In percent)
15	10	1. Strongly agree
58	40	2. Somewhat agree
1	2	3. Neither agree nor disagree (do not read)
21	29	4. Somewhat disagree
5	20	5. Strongly disagree
0	0	8. Don't know

D5.4 **(The next statement is:) Humans must live in harmony with nature in order to survive. (Do you strongly agree, somewhat agree, somewhat disagree or strongly disagree?)**

Line	Staff	(In percent)
67	69	1. Strongly agree
30	27	2. Somewhat agree
0	0	3. Neither agree nor disagree (do not read)
3	3	4. Somewhat disagree
0	0	5. Strongly disagree
0	0	8. Don't know

D5.5 **(The next statement is:) Human interference with nature often produces disastrous consequences. (Do you strongly agree, somewhat agree, somewhat disagree or strongly disagree?)**

Line	Staff	(In percent)
25	41	1. Strongly agree
43	40	2. Somewhat agree
1	1	3. Neither agree nor disagree (do not read)
25	15	4. Somewhat disagree
5	3	5. Strongly disagree
0	0	8. Don't know

D5.6 **(The next statement is:) Nature's resources are vast and thus there is little likelihood that humans will exhaust them in the near future. (Do you strongly agree, somewhat agree, somewhat disagree or strongly disagree?)**

Line	Staff	(In percent)
1	4	1. Strongly agree
7	12	2. Somewhat agree
0	0	3. Neither agree nor disagree (do not read)
36	25	4. Somewhat disagree
56	59	5. Strongly disagree
0	0	8. Don't know

D5.7 **(The next statement is:) Society will have plenty of warning to make adjustments before any lasting harm is done to the environment. (Do you strongly agree, somewhat agree, somewhat disagree or strongly disagree?)**

Line	Staff	(In percent)
3	4	1. Strongly agree
18	16	2. Somewhat agree
0	0	3. Neither agree nor disagree (do not read)
41	31	4. Somewhat disagree
38	49	5. Strongly disagree
0	1	8. Don't know

D6. **Briefly, what do you think have been the most important positive changes in the Forest Service over the past 10 years?**

Better Resource Balance

Line	Staff	(In percent)
10.0	9.4	01. Increased emphasis on fish, wildlife, wilderness
7.3	9.1	02. Increased emphasis on recreation, trails
2.0	3.6	03. Increased emphasis on/sensitivity to threatened & endangered species
7.9	13.1	04. Decreased emphasis on timber, managing for other resources besides timber
.7	1.0	05. Decreased emphasis on range uses
.2	.3	06. Decreased emphasis on mining
.7	1.7	08. Preservation of old growth
11.4	5.4	09. Increased emphasis on non-commodity resources/amenities; decreased emphasis on commodity
9.2	3.7	10. Better resource balance, between commodities and amenities; more balanced program
2.0	.8	11. Limits to commodity outputs; shift away from commodity production

a nec: not elsewhere classified
b nfs: not further specified

Better Management

Line	Staff	(In percent)	
3.8	5.8	13.	Honest attempts to implement multiple use; continued reemphasis/increased emphasis on multiple use
6	.7	17.	Sustainability of resources; future generations
1.1	3.9	18.	Reduction of clearcutting
.3	.2	20.	Concern for health of forest
.5	1.4	21.	Recommitment to protecting resources; sound management practices
.9	2.9	22.	Changes in timber management/harvest practices and policies
.7	.6	25.	Resource balance/emphasis, nec[a], nfs[b]

Better Protection of Resources

Line	Staff	(In percent)	
10.5	6.8	07.	Increased emphasis on ecosystem; manage for entire ecosystem, biological diversity
.1	.2	14.	Protection of resources where necessary
.7	.7	15.	Improvement in rangeland planning; greater recognition of rangeland problems
2.5	4.5	16.	Stronger soil and water standards/guidelines; greater concern about soils and water quality
10.0	14.9	19.	Increasing environmental/ecological sensitivity/awareness
1.3	1.1	43.	Addressing global concerns
1.4	.5	68.	Stronger environmental ethics in agency; a stronger sense of stewardship

Better Planning

Line	Staff	(In percent)	
1.5	1.3	26.	Increased emphasis on research, appreciation of research; increased use of sound scientific information
1.9	.5	27.	National Forest Management Act
1.9	2.2	28.	National Environmental Policy Act
.4	.4	29.	Endangered Species Act
2.9	1.9	30.	Forest/land Use Planning Process
2.0	.5	31.	Resource Planning Act
2.7	1.0	32.	New Perspectives; New Forestry
.4	.5	34.	National Recreation Strategy; the "Recreation Initiative"
.1	.1	35.	Rise to the Future; Initiatives Plans for the Future
5.1	2.9	36.	Increased emphasis on forest plans
2.1	.7	37.	Implementation and/or better implementation/monitoring of forest plans
.6	.9	39.	Improving the planning process
.5	.4	40.	Land management planning
4.6	2.5	42.	Better integrated management/planning, better quality resource management; holistic approach to management
.1	.0	44.	Addressing economic requirements of forest
.8	.3	46.	Address local community/economic issues/concerns
.4	.6	47.	Recognition of the need for consensus planning
.9	.3	49.	Greater emphasis on International Forestry
1.0	.1	50.	Forest planning, nec[a], nfs[b]

Positive Internal Changes

Line	Staff	(In percent)	
8.0	5.3	45.	More disciplines involved in planning/decision making; diversification in disciplines; more non-forestry disciplines
17.6	15.6	51.	Diversification of work force
1.1	1.3	52.	Willing to admit mistakes and make improvements; openness to change
5.3	1.9	53.	Bottom up rather than top down policy/management, decentralization, participation management, empowerment of employees/staff; transfer of decision making to the field unit
.1	.3	54.	Striving for quality management; improved management
.6	.3	55.	More flexible
.3	.1	56.	Team work
5.3	5.0	57.	Better human resource programs/work conditions, better communication, more freedom for employees to express views
3.7	2.1	58.	Acceptance of a broadening range of values; more openness to new ideas; broadening perspectives
2.3	2.6	59.	Higher quality staff, more expertise; turnover in personnel; new/young blood in agency
1.0	.6	60.	More openness in management; old boys network breaking down
.2	.1	61.	Deemphasis of mobility policy
.7	.1	62.	Increased funding, changes in appropriations
.6	.1	63.	Management appeals process; appeals process put in place for public
.6	.3	64.	Acceptance of non-commodity, non-traditional values
1.2	2.1	65.	Better training for personnel; better tools, e.g., computers; improved technologies
1.7	.5	66.	Change in administrative leadership; strengthened leadership; change in the old guard
.5	.0	67.	Reducing amount of regulations, streamlining the bureaucracy
.6	1.2	69.	More self-examination; more internal debate about agency practices/policies
.6	.9	70.	Internal changes, nec[a], nfs[b]
.4	.0	73.	Increased credibility; regaining leadership role

Increased Responsiveness

Line	Staff	(In percent)	
2.3	2.7	71.	Increased interest/pressure from public; pressure from the environmental movement
2.2	1.0	72.	Customer service orientation, sensitivity to users, serving the public
9.5	8.2	74.	Increased responsiveness to public/interest groups, greater accountability
2.0	1.7	75.	Greater awareness and acceptance of current social values/public needs/public demands
27.2	19.3	76.	Increased public involvement in decision making/planning process; public involvement, getting more input
.2	.5	77.	Trying to please higher percentage of people, not just responding to most vocal/special/traditional interest group
1.4	1.6	78.	Keeping public better informed; more open
.2	.0	79.	Dealing with detractors; weathering criticism
.5	.7	81.	Increased responsiveness/interaction with environmental groups
.9	.3	83.	Partnership programs
.5	.5	85.	Public relations, nec[a], nfs[b]

Other

Line	Staff	(In percent)	
.1	.3	80.	Balance pressure of environmental vs commodity groups
.6	.8	82.	A swing away from influence of private industry
7.5	12.4	97.	Other
.0	.1	90.	Not too many
.1	.3	91.	None
.1	.7	98.	Don't know

D7. Briefly, what do you think have been the most important negative changes in the Forest Service over the past 10 years?

Increasing Interference/Politics

Line	Staff	(In percent)	
1.0	.3	001.	Political pressure to maintain/increase timber/commodity outputs, targets
2.0	1.5	002.	Too responsive to Congress/political pressure
9.0	5.4	004.	Politics/lobbying plays too big a role in decision making; increasing political pressure; politicization of agency
.8	.9	005.	Courts managing forest, making decisions
8.3	2.9	006.	Congressional interference in management decisions; micromanagement
1.4	1.0	008.	Congress setting targets
.8	.3	009.	Conflicting demands from Congress; lack of clear direction from Congress/Administration
1.3	.7	020.	Political/Congressional interference, nec, nfs
7.3	6.6	021.	Too responsive to, pressure from public/interest groups
1.0	1.6	022.	Influence of commodity groups
2.5	3.9	023.	Influence of environmental groups
4.0	2.2	108.	Moving away from sound scientific management, silviculture —decisions based on something other than sound management, giving in to pressure/politics
.1	.1	126.	Not enough land, increased demand
1.7	.8	153.	Conflicting demands, inability to resolve
1.5	.3	159.	Trying to be all things to all people
.7	1.3	265.	Reagan/Bush Administration(s)
.1	.1	271.	Lack of Congressional support
.3	.1	272.	Poor relationship with Congress
.2	.0	273.	Inability to pass needed legislation
.4	.5	274.	Failure to defend decisions, policy
.2	.0	358.	Increased use of forests

Commodity Output Still Too High

Line	Staff	(In percent)	
1.6	.8	100.	Continued commodity emphasis, increased production
2.2	4.2	101.	Continued timber emphasis/targets still too high
.2	.7	102.	Increased emphasis on timber; increased targets
.5	.8	109.	Below cost timber sales, foreign sales
.6	.4	112.	Too much emphasis on maintaining traditional values, target driven

[a] nec: not elsewhere classified
[b] nfs: not further specified

Move From Traditional Values

Line	Staff		(In percent)
1.1	1.7	103.	Decreased emphasis on timber/commodity outputs
.4	.4	111.	Elimination of clearcutting
.4	.1	115.	Too much emphasis on preservation
1.0	.2	118.	Too much emphasis on single species/issue management; not managing for multiple use

Failure to Protect Resources

Line	Staff		(In percent)
1.2	1.0	110.	Failure to respond to spotted owl issue, old growth
.6	1.3	121.	Lack of commitment to protect environment
.0	.7	127.	Mention of threatened, endangered species
.7	.0	357.	Lack of commitment to environmental education

Obstacles to Good Process

Line	Staff		(In percent)
1.4	.6	151.	Too much NEPA work, negative mentions of NEPA
7.3	3.7	152.	Appeals and litigation
1.7	.7	154.	Planning process too cumbersome, complex, takes too much time; inflexible
5.9	3.0	155.	Too many procedures/regulations, too much paperwork — inhibits ability to get things done on the ground, can't spend as much time in the field
1.4	.6	157.	Decreased commitment to/lack of funding for research
.1	.1	158.	Decreased commitment to State and Private Forestry
.3	.4	160.	Not enough local influence on decisions
.5	.3	161.	Loss of long term perspective
.7	.9	200.	Planning, nec[a], nfs[b]

Employment/Staff Problems

Line	Staff		(In percent)
2.4	5.4	201.	Affirmative action, reverse discrimination, court mandated changes, quota system
1.4	2.8	202.	Consent decree
3.1	1.9	203.	Too much emphasis on workforce diversity; implementation handled badly
.2	.3	204.	Too little emphasis on workforce diversity
2.4	2.6	205.	Insufficient staff, employees overworked, stress
1.0	.7	206.	Too much fast tracking of employees, promoting incompetence
.5	.3	207.	Promotions based on meeting timber targets; discrimination against people who aren't for targets; fear of speaking out
.1	.5	208.	Low pay, lack of consistency in pay scales
3.3	1.6	209.	Low morale
.1	.2	210.	Reduced mobility in workforce
.2	.0	211.	Lack of job security
.4	1.8	212.	Work force reduction
.6	1.1	213.	Workforce diversity, nec[a], nfs[b]
.1	.0	214.	Too many support staff
.2	.5	215.	Too many transfers, forced transfers
.1	.2	216.	Staff unclear about duties, focus of job, direction
.9	1.9	217.	Hiring unqualified people
2.5	6.7	250.	Employment/hiring/promotion, nec[a], nfs[b]
1.6	.9	252.	Lack of expertise, professionalism; too little training
.4	.2	256.	Not enough support for field staff, on the ground
.5	.4	259.	Decreased commitment/loyalty of employees
.6	.3	276.	Staff has less time to spend in forest, in the field

Agency Direction/Leadership

Line	Staff		(In percent)
.3	1.1	120.	Reluctance to eliminate clearcutting
1.2	.3	251.	Too many staff in management; top heavy
.9	1.5	253.	Lack of ability to get things done/make and implement decisions
2.7	1.7	254.	Loss of roots, lack of mission, losing track of goals/focus
3.0	1.5	255.	Slow implementation of changes, not responding fast enough; don't anticipate problems, end up being forced to react
1.4	.4	257.	Forest Service fails to take leadership role, doesn't take a stand on important issues
4.3	3.2	258.	Lack of/poor leadership; poor leadership at the top
2.1	1.0	260.	Resistance to change
1.1	.8	261.	Lack of consensus, increased polarization of work force
.7	.3	262.	Lack of respect for field staff — district ranger and district staffs; lack of input on decisions
4.1	2.2	263.	Managing from top down, centralized authority, bureaucracy; managers removed fromland
.1	.0	264.	Forest Service too confrontational
.7	.5	269.	Loss of professional resource manager; lack of input by professionals; inexperienced people have too much input
1.1	.1	270.	Adapting to changes — changes coming too quickly, too often
.2	.7	275.	All talk and no action; say one thing and do another
.1	.2	277.	Coverups within agency
.1	.0	278.	Leaders too commodity oriented
.1	.1	280.	Decreasing power/input for line officers
.0	.2	281.	Lack of accountability by staff
2.1	2.6	300.	Internal management/staff/leadership problems, nec[a], nfs[b]

Funding/Budget Problems

Line	Staff		(In percent)
6.2	6.7	301.	Insufficient funding; lack of consistency
.6	.0	302.	Line item funding
.9	.1	303.	Too much of budget goes for overhead —Washington office, regional offices, etc.
.1	.5	304.	Not enough money for specific area of concern—e.g., fire prevention/fighting, recreation, etc.
1.3	.8	305.	Budgeting process problems
.2	1.0	306.	Not following financial plans, not using money wisely
1.5	.5	307.	Not enough funding at field/ground level
.2	.2	309.	Increased funding of timber/commodity programs
2.5	.4	310.	Congressional dictates on budgeting, how money is spent
1.4	1.3	350.	Funding/budget problems, nec[a], nfs[b]

Public Relations

Line	Staff		(In percent)
4.1	3.2	351.	Loss of credibility, lack of public confidence
.4	.1	352.	Public scrutiny, lack of support
.5	.4	353.	Lack of/not enough attention paid to public input, dialogue
1.9	.9	354.	Not enough publicity, not getting across what Forest Service does
.0	.1	355.	Dissemination of misinformation, not responding to misinformation
1.8	1.5	356.	Not responsive enough to public, not keeping pace with changing values
1.2	.5	400.	Public relations nec[a], nfs[b]

Other

Line	Staff		(In percent)
.1	.6	122.	Clearcutting, nec[a], nfs[b]
.5	1.2	123.	Mention of wilderness, grazing, range
.1	1.4	124.	Mention of recreation, too many roads
.1	.5	125.	Mention of wildlife
1.3	2.3	150.	Resource balance/emphasis, nec[a], nfs[b]
4.0	3.5	997.	Other

None

Line	Staff		(In percent)
.0	1.0	996.	None
.1	1.1	998.	Don't know

D8. What do you think is the single most important change that still needs to be made (Probe for clarity only.)

More Responsive

Line	Staff		(In percent)
3.0	2.4	001.	Increase/continue commitment to public/interest group involvement/input, dialogue, better communication
4.9	5.3	004.	Public education, better inform the public/Congress
1.2	1.1	005.	Need public/Forest Service/Congressional consensus on direction
.6	.0	012.	Need to gain support of Congress, Administration, public
6.9	4.0	013.	Increased sensitivity to public needs; more responsive to public
.6	.7	014.	Better public image
.5	.7	050.	Public relations/input, nec[a], nfs[b]
.2	.7	107.	Manage forests for everybody

Less Interference/Politics

Line	Staff		(In percent)
2.0	2.1	051.	Congress shouldn't set targets; budget shouldn't be tied to targets
.5	.0	052.	Congress shouldn't manage/interfere with resource balance, shouldn't micromanage
.1	.0	053.	Congress should reflect the will of the people, not political action groups, lobbyists
.6	.4	054.	Clear direction from Congress
.8	.5	055.	Conflicting demands from various groups; need to reconcile
5.0	5.0	056.	Too responsive to Congress, interest/commodity groups; keep politics out; defend policies; stand up to external influences
.8	.3	100.	Congress/Politics, nec[a], nfs[b]

a nec: not elsewhere classified
b nfs: not further specified

Environmental Awareness

Line	Staff		(In percent)
.5	.3	003.	Environmental education
2.2	3.6	111.	More emphasis on ecological balance, environment
1.3	1.2	120.	Balance timber/commodity outputs with environmental concerns
.2	1.0	123.	Increased protection of threatened and endangered species, spotted owl, old growth
.2	.7	127.	Move towards preservation
.6	.3	217.	Mention of global environmental concerns

Increase Noncommodity/Decrease Commodity Emphasis

Line	Staff		(In percent)
4.6	2.4	101.	Decrease emphasis on commodities; increase emphasis on non-commodity resources/amenities
.7	3.4	105.	Increase emphasis on fish and/or wildlife and/or recreation
3.5	5.3	106.	Decrease emphasis on meeting targets; get rid of targets; reduce ASQ's/harvest
.6	.9	108.	Move away from traditional values/thinking
.0	1.7	110.	Mention of timber — resolve problems, more flexible outlook
4.7	3.6	113.	Stewardship, manage for best needs of the forest despite politics; commitment to the land; conservation
.6	.7	114.	Deemphasize grazing, balance grazing with other resources
3.7	2.2	115.	Emphasis on proper resource balance, balance between commodity and amenity
.8	1.7	121.	Increased emphasis on water, watershed, riparian areas, air quality
.1	.0	122.	Reduce emphasis on minerals
.4	.1	126.	Stop multiple use, doesn't work

Back to Traditional Values

Line	Staff		(In percent)
1.7	2.3	103.	Reemphasis on multiple use
.5	.5	116.	Reemphasis on managing resources
.4	.2	800.	Go back to the way it was, back to basics

Better Resource Management

Line	Staff		(In percent)
5.4	3.4	102.	Manage for/increase emphasis on entire ecosystem
.5	.9	104.	Recognition of limited resources
1.0	.6	118.	Increase emphasis on integrated resource management
.2	.3	119.	Reduce below-cost timber sales; increase timber sale prices
.2	1.0	124.	Reduce clearcutting; improve clearcutting methods
.2	.4	125.	Monitor what is going on in forests, forest plans
1.5	2.7	200.	Resource issues/balance, nec[a], nfs[b]

Better planning/better process

Line	Staff		(in percent)
2.0	1.0	008.	Change appeals process, reduce amount of litigation
.2	.0	201.	Need to reconsider what we expect from public lands
1.0	.3	202.	Revise forest plans, manage each forest individually
1.3	2.5	203.	Increase emphasis on/budgeting for research
1.4	1.9	208.	Plan/manage for future generations, sustainability, long term planning
.9	.5	210.	Better coordination between management and research/other agencies
.1	.0	212.	Strengthen public use mandate
.1	.0	213.	Increase user fees
.1	.0	214.	Develop better accounting of costs of decisions
.4	.6	215.	Need to recognize importance of ethical and social concerns in planning/management
1.8	1.1	216.	Need to do a better job, make sound decisions, better forest plans
1.5	.1	218.	Change laws, too many, too cumbersome
1.3	1.1	300.	Planning, nec[a], nfs[b]

Better leadership

Line	Staff		(in percent)
2.9	1.0	006.	Fs should regain leadership role, regain credibility with public, higher confidence level
.5	.3	010.	Agency needs to be more open/truthful, willing to admit mistakes
1.8	1.7	301.	Streamline agency, reduce bureaucracy, reduce paperwork, reorganize
3.2	2.4	302.	Need to redefine/come to consensus on fs mission; need vision, focus, mission
3.3	2.5	304.	Greater emphasis on district level decisions/planning, authority at grass roots level
2.0	2.3	305.	Do what fs says it will do, respond in timely manner, increased commitment to policy changes
3.7	2.1	307.	Better, more experienced, more ethical leadership
1.3	.5	310.	Need to be willing to change
1.0	1.6	311.	Listen to professionals/trained staff
2.8	1.6	312.	Decentralization; bottom up decision making, empowerment of staff, get rid of military structure
.2	.7	314.	Better internal communication
.2	.0	315.	Moving in right direction, continue
2.2	.7	316.	Implement current plans, make sure people on ground are aware of/following plans
1.4	1.2	400.	Internal management, nec[a], nfs[b]

Better employment practices

Line	Staff		(in percent)
2.1	2.7	401.	Promotion of/acceptance of/increase in workforce diversity
1.5	.4	403.	Increase staffing, need more people, don't have resources to get things done
.1	.1	404.	Don't move people around so much; stabilize workforce
1.5	1.9	405.	Hire/promote based on merit; need high quality staff
.2	.1	406.	Slow down/better implementation of workforce diversity
.2	.0	408.	Clearer definition of job/roles
.6	.7	410.	Increase loyalty, commitment of staff; improve morale
.4	.2	411.	Make people accountable
.5	1.1	412.	Workforce diversity, nec[a], nfs[b]
.1	1.0	413.	Equitable pay
.7	1.5	415.	Better/fairer treatment of staff; people first
.0	.1	416.	Reduce staff
.1	2.5	500.	Employment, nec[a], nfs[b]

Increase funding

Line	Staff		(in percent)
2.3	1.5	501.	Increase funding
2.2	1.0	502.	Increased funding for on the ground, field work; reduce overhead
3.5	1.3	503.	Budget for implementation of forest plan
.2	.3	505.	Better distribution of appropriations
.6	.4	507.	Balance budget; wise spending
1.2	.7	508.	Increase funding or recreation, other amenities; shift funding away from commodity
2.0	.7	509.	Change budget process: e.g., Speed up process, multi-year funding
1.0	2.2	600.	Funding, budget, nec[a], nfs[b]
.1	.0	995.	Nothing
2.9	2.3	997.	Other
.6	1.5	998.	Don't know

D9. Are you familiar with the 1990 RPA strategic plan? (if responder asks what RPA stands for, say: Resources Planning Act)

Line	Staff		(in percent)
89	37	1.	Yes
11	63	2.	No —>go to D10.1
0	0	8.	Don't know —>go to D10.1

D9a. How familiar are you with the RPA strategic plan: Would you say very familiar, somewhat familiar or only a little familiar?

Line	Staff		(in percent)
11	2	1.	Very familiar
48	14	2.	Somewhat familiar
30	21	3.	Only a little familiar
11	63	4.	Not at all familiar
0	0	8.	Don't know

Now I'm going to read you a few statements about your job. For each one, please tell me how strongly you agree or disagree.

D10.1 Forest Service management does not provide people like me with enough direction and structure to guide day-to-day decisions and activities. (Do you strongly agree, somewhat agree, somewhat disagree or strongly disagree)?

Line	Staff		(In percent)
1	7	1.	Strongly agree
5	20	2.	Somewhat agree
0	1	3.	Neither agree nor disagree (do not read)
27	35	4.	Somewhat disagree
66	37	5.	Strongly disagree
0	0	8.	Don't know

[a] nec: not elsewhere classified
[b] nfs: not further specified

D10.2 In general, I know what I'm accountable for on the job. (Do you strongly agree, somewhat agree, somewhat disagree or strongly disagree?)

Line	Staff	(In percent)
85	73	1. Strongly agree
13	22	2. Somewhat agree
0	0	3. Neither agree nor disagree (do not read)
1	4	4. Somewhat disagree
1	1	5. Strongly disagree

D10.3 In general, the system provides appropriate feedback for me to know how I'm doing on the job (Do you strongly agree, somewhat agree, somewhat disagree or strongly disagree?)

Line	Staff	(In percent)
40	34	1. Strongly agree
43	42	2. Somewhat agree
0	0	3. Neither agree nor disagree (do not read)
13	16	4. Somewhat disagree
3	8	5. Strongly disagree
0	0	8. Don't know

SECTION E

Just a few more questions about you.

E1. How many years have you worked for the Forest Service?

Line	Staff	
21	16	Average number of years

E2. For what Forest Service region, including the Washington office, have you worked the longest?

(Probe for station, lab or region. If responder indicates he/she worked in two areas for exactly the same amount of time, record first mention.)

01. Northern Region
02. Rocky Mountain Region
03. Southwestern Region
04. Intermountain Region
05. Pacific Southwest Region
06. Pacific Northwest Region
08. Southern Region
09. Eastern Region
10. Alaska Region
11. Washington Office
12. Northeast Station
13. Southeast Station
14. Southern Station
15. North Central Station
16. Intermountain Station
17. Rocky Mountain Station
18. Pacific Northwest Station
19. Pacific Southwest Station
20. Forest Products Lab
21. State And Private Forestry
22. Other_____

E3. Are you directly involved in forest planning?

Line	Staff	(In percent)
61	23	1. Yes
39	77	2. No —> E4
0	0	8. Don't know

E3a. How much input do you have on forest planning —a great deal, some, or only a little?

Line	Staff	(In percent)
36	6	1. A great deal
22	11	2. Some
3	7	3. Only a little
39	77	None
0	0	8. Don't know

E4. What is your GS rating? (Interviewer: If GM rating mentioned, accept it in place of GS rating.)

_____GS/GM Rating
96. Other _____
00. Senior Executive Service

If GS rating is 12 or higher ask:

E5. Are you line or staff? (Do not probe "don't know")

Line	Staff	(In percent)
94	14	1. Line
4	78	2. Staff
2	9	8. Don't know

E6. What is your current position?

01-10 Forestry Occupations
01. Silviculturist, Forest Silviculturist
02. Forester; Associate Forester
03. Lands Forester
04. Supervisory Forester
05. Sale prep, sale forester
06. Timber forester, timber prep
07. Reforestation staff
10. Other forestry occupations, nec[a], nfs[b] — forestry tech, forestry aide, forestry trainee

11-30 Other Natural Resource Occupations (Non-Research Branch)
11. Timber saff
12. Minerals occupations — minerals leasing technician, minerals staff
13. Resource Forester, Resource Specialist
14. Resource Officer/Assistant, resource staff, resource clerk
15. Firefighter, other fire occupations
16. Range Conservationist
17. Other range occupations — range staff
18. Wildlife Biologist
19. Other wildlife occupations — wildlife staff
20. Other biological occupations — aide, technical director, district biologist
21. Hydrologist
22. Other hydrology/water occupations —water staff, watershed staff
23. Recreation Forester
24. Other recreation occupations — rec staff, rec assistant
25. Soil Scientist (non-research), soil staff
26. Air staff
27. Land management staff
28. Fish staff
29. Botanist
30. Other natural resource occupations, nec[a], nfs[b]

31-40 Other Professional (Non-Research Branch)
31. Archeologist, Assistant Archeologist
32. Engineer
33. Planning staff, other planning occupations
34. Economist
35. Budget Coordinator, Analyst
36. Social science occupations, nec, nfs
37. Landscape Architect
40. Other professional, nec[a], nfs

41-60 Research Branch
42. Project Leader, Program Manager
43. Soil Scientist —research, supervisory
44. Research Ecologist
45. Research Forester
46. Hydrologist/Supervisory Hydrologist
47. Research Biologist, Research Plant Biologist, Plant pathology, physiology
48. Research Chemist
49. Research planning
50. Tropical forestry
51. Research Entomologist
52. Technical Information Specialist
53. Team Leader
54. Research Wildlife Biologist
58. Research Social Scientist, nec[a], nfs[b]
59. Research Scientist, nec[a], nfs[b]
60. Other research occupations, nec[a], nfs[b]

61-80. Administration
61. Chief, Associate Chief, Deputy Chief, Associate Deputy Chief, Station Director, Area Director of State and Private Forestry, Regional Forester, Deputy Regional Forester
63. Forest Supervior, Acting Forest Supervisor, Deputy Forest Supervisor
64. Ranger; District Ranger/Manager: Deputy/Assistant Ranger
66. Director/Asst Director for Administration
67. District Administrative Officer
68. Personnel occupations —specialist
69. Accounting —Accountant, Accounting Technician, Voucher Technician, Budget Assistant
70. Computer occupations — Resource Data Manager, Computer Assistant, Computer Specialist
71. Purchasing occupations
72. Business administration occupations
73. Program/Management Analyst

[a] nec: not elsewhere classified
[b] nfs: not further specified

74. Program/staff officer
75. Legislative Coordinator
76. Contract Officer/Specialist
77. Operation Research Analyst
78. Deputy Forest Supervisor
79. Deputy/Assistant Ranger
80. Other administrative occupations, nec[a], nfs[b]

81-90 Other
81. Secretary, clerk typist, office manager
82. Nurse
83. Engineering tech occupations
84. Support services supervisor/specialist
85. Personal assistant, program assistant, executive assistant, staff assistant
86. Construction/maintenance occupations
87. Equipment/transportation occupations
88. Law enforcement occupations
89. Realty occupations
90. Sales Occupations
91. Surveying occupations
97. Other occupations, nec[a], nfs[b]

98. Don't know
99. Not Applicable, refused

If Staff:

E7. Do you ever want to be a line officer?

Staff	(In percent)	
29	1.	Yes
68	2.	No
3	8.	Don't know

If Staff:

E8. Realistically, could someone in your current position receive promotions which could eventually lead to a line position?

Staff	(In percent)	
55	1.	Yes
44	2.	No
2	8.	Don't know

E9. Were you line or staff 10 years ago?

Line	Staff	(In percent)	
42	17	1.	Line
54	73	2.	Staff
4	10	8.	Don't know

If more than 10 years service, go to question E12
IF GS rating is between 01-11 go to question E10

E10. What was your position 10 years ago?

See codes at E6.

E11. What was your GS rating 10 years ago? (Interviewer: If GM rating mentioned, accept it in place of GS rating.)

_____GS/GM Rating
96. Other _____
00. Senior Executive Service

E12. In what program area of the Forest Service are you currently employed? For example: Forestry, Wildlife Management, Range, Water or Soils, Recreation or some other program area. (Circle all that apply.)

01. Forest management, silviculture, forestry, timber,forest inventory
02. Wildlife/fisheries management/biology
03. Range
04. Watershed management/water/soil/hydrology
05. Recreation
06. Fire management
07. Engineering
08. Geology/Mining
09. Planning
10. Administration/administrative services
11. Line
12. Research
13. Other

E13. Do you think you will be employed by the Forest Service 10 years from now, working elsewhere, or will you be retired by then?

Line	Staff	(In percent)	
47	56	1.	Forest Service
5	10	2.	Elsewhere
46	33	3.	Retired
2	2	8.	Don't know

E14. Many people talk about being politically liberal or conservative. Would you describe yourself as being very liberal, somewhat liberal, somewhat conservative or very conservative?

Line	Staff	(In percent)	
4	6	1.	Very liberal
38	35	2.	Somewhat liberal
3	3	3.	In between/independent (Do not read)
49	49	4.	Somewhat conservative
6	5	5.	Very conservative
1	1	8.	Don't know

E15. Do you think of yourself as an environmentalist?

Line	Staff	(In percent)	
78	65	1.	Yes
21	35	2.	No
1	0	8.	Don't know

E15a. In general, how favorable is your impression of environmentalists? Would you say very favorable, somewhat favorable, somewhat unfavorable or very unfavorable?

Line	Staff	(In percent)	
7	9	1.	Very favorable
57	54	2.	Somewhat favorable
30	28	3.	Somewhat unfavorable
4	8	4.	Very unfavorable
2	2	8.	Don't know

E15b. Why do you feel that way (about environmentalists)? (Probe for clarity only.)

Good Input/Information

Line	Staff	(In percent)	
6.4	7.0	01.	Point out problems/mistakes that are being made, changes that need to be made, have led to a heightened awareness of problems, watchdog
4.4	3.1	03.	Present other (non-Forest Service, non-commodity) side of issue, balanced viewpoint, checks and balances
1.4	.2	04.	Present public's views, changing social values
2.6	1.4	05.	Ask questions and force Forest Service to answer; Forest Service must more fully understand impacts/policies; monitor agency
4.9	2.1	11.	Have brought about needed policy changes; made Forest Service move in the right direction
2.0	.7	13.	Want to promote good management, use scientific information to improve forests
1.9	.5	14.	Have made Forest Service a stronger/better agency, positive influence on process
2.4	1.6	17.	Working to preserve resources; long term planning
1.4	1.2	18.	Better balance between commodity and non-commodity, shift from commodity emphasis

Good Intentions/Goals

Line	Staff	(In percent)	
2.5	1.0	19.	Better educated than they used to be, know what they're doing
5.1	5.8	21.	Have best interest of environment in mind, help protect world/environment
6.6	11.7	22.	Everyone needs to be active about environment; responder thinks environmental concerns are important; environmentalists reflect responder's personal views/philosophy
1.3	.5	24.	Positive feelings based on responder's personal experience with environmentalists
4.0	2.7	26.	Addressing critical issues, have good ideas, admirable cause, on the right track
8.4	5.3	27.	Very committed; good intentions; speak their conviction
.2	.1	28.	Positive comments about specific groups
.6	2.2	29.	Environmentalists are essential, necessary, important
.4	.7	30.	Positive comment, nec[a], nfs[b]

[a] nec: not elsewhere classified
[b] nfs: not further specified

Neutral

Line	Staff	(In percent)	
6.8	7.7	72.	Generally good, but some go to extremes, go too far
3.1	3.2	74.	*Some groups are well intentioned, others are not*
2.6	2.3	75.	Like environmentalists goals, but sometimes not methods
2.1	3.0	76.	Depends
.6	.1	78.	Membership good, leaders/national groups bad
.8	.2	79.	"We're all environmentalists in the Forest Service"
2.9	2.2	80.	Mentions distinction between preservationists and environmentalists
.4	.2	90.	Neutral comment, nec[a], nfs[b]

Poor Tactics

Line	Staff	(In percent)	
2.6	2.9	31.	Use unprincipled tactics
11.0	9.2	34.	Subjective, unscientific thinking, speak with emotion rather than knowledge, don't have the knowledge, naive
4.9	3.9	35.	Hidden agendas, ulterior motives, self interest
3.2	1.7	36.	Overstate, exaggerate problems, take things out of context, distort issues
3.7	2.7	41.	Lie, use information that isn't accurate, lack integrity, hypocritical, unethical, don't want solutions, just cause problems
.9	1.6	44.	Unrealistic
3.8	2.6	45.	Inflexible, unwilling to compromise, confrontational, too demanding; difficult to work with
3.8	3.5	47.	Don't listen to other people's point of view; narrow point of view
.9	1.0	49.	Abuse of appeals system
.2	.6	50.	Approach/tactics, nec, nfs
1.1	1.1	54.	Politically motivated
.4	.2	57.	Have led to too much distrust of Forest Service; loss of credibility
.6	1.5	58.	Respnder's personal experience with environmentalists; disagrees with their objectives
.6	.9	59.	Too much power
.2	.2	60.	Philosophy, nec[a], nfs[b]
1.3	1.6	70.	Negative comment, nec[a], nfs[b]

Extremist Positions

Line	Staff	(In percent)	
9.7	16.9	32.	Extremist views/fringe groups dominate, get all the publicity; too radical; take extreme stands, go overboard
5.4	5.2	40.	Single-interests dominate, don't think of whole system, concentrate on one area
.6	.8	42.	Vocal minority, don't represent views of general public
1.2	2.5	48.	Don't look at human/social costs of actions
2.9	1.0	52.	Preservationists

Force Bad Policy Decisions

Line	Staff	(In percent)	
.8	.4	51.	Impose unwise policies on land, don't know how to manage resources
.9	2.7	53.	Stop commodity output/development; stop human use of resource
.4	.4	55.	Some of their actions increase costs to taxpayers
.2	.1	56.	Don't take into account Congressional mandate/Forest Service mission
1.8	2.0	97.	Other
1.2	2.0	98.	Don't know

Exact time now: _____

E16a. As best you can remember, about how many times during the past 12 months did you read, see or hear anything positive about the Forest Service on national or local media, including TV, radio, or newspapers?

Line	Staff	
18	9	Average number of times

If only one time:

E16b. Was that read, seen or heard in the national media, such as on network or national cable news or entertainment programs, or on a nationally produced radio program, or in a national newspaper?

Line	Staff	(In percent)	
37	34	1.	Yes
63	64	2.	No
0	3	8.	Don't know

If more than one time:

E16c. About how many of those (number) times did you read, see or hear positive information in the national media, such as on network or national cable news or entertainment programs, or on a nationally produced radio program, or in a national newspaper?

Line	Staff	
4	3	Average number of times

a nec: not elsewhere classified

b nfs: not further specified

E17a. As best you can remember, about how many times during the past 12 months did you read, see or hear anything negative about the Forest Service on national or local media, including TV, radio, or newspapers?

Line	Staff	
52	32	Average number of times

If only one time:

E17b. Was that read, seen or heard in the national media, such as on network or national cable news or entertainment programs, or on a nationally produced radio program, or in a national newspaper?

Line	Staff	(In percent)	
100	84	1.	Yes
0	16	2.	No

If more than one time:

E17c. About how many of those (number) times did you read, see or hear negative information in the national media, such as on network or national cable news or entertainment programs, or on a nationally produced radio program, or in a national newspaper?

Line	Staff	
27	18	Average number of times

Exact time now:_____

Thanks. That's my last question. I want you to know how much we really appreciate all of the time that you have given and how helpful and honest you were in answering my questions. Thank you again so very much for your help.

INTERVIEWER OBSERVATIONS

Interviewer: the following questions are to be completed after you are off the phone. please be as accurate as possible.

1. How would you describe the overall quality of the interview? ("Don't know" — not allowed)

Line	Staff	(In percent)	
56	45	1.	Excellent
30	30	2.	Very good
12	19	3.	Good
1	4	4.	Fair
0	2	5.	Poor

2. Is this interview's data of high enough quality to be included in the study? ("Don't know" — not allowed)

Line	Staff	(In percent)	
78	59	1.	Definitely yes
21	36	2.	Probably yes
1	4	3.	Probably no
0	1	4.	Definitely no

3. Did the responder have a problem with not feeling he or she was able to answer many of the questions?

Line	Staff	(In percent)	
3	14	1.	Yes
97	86	2.	No

If the answer to question 1 is good, fair or poor; or the answer to question 2 is not definitely yes:

3.1. What concerns do you have with the quality of the interview or the quality of the data?

Select 1-6 as appropriate, but answer 7 in any case.

1.Others present - responder was interrupted off the phone
2.Others interrupted responder on the phone (i.e., responder has party-line)
3.Responder probably had to watch what was said due to presence of others
4.Responder seemed concerned with confidentiality
5.Responder seemed to give "programmed" responses
6.Responder was hostile to interview questions or in general tone

7.Details of concerns (specify): _____

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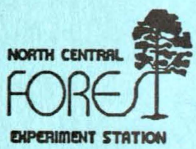
Mohai, Paul; Stillman, Phyllis; Jakes, Pamela; Liggett, Chris. 1994. **Change in the USDA Forest Service: are we heading in the right direction?** Gen. Tech. Rep. NC-172. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 129 p.

Reports the results of a survey of 1,809 Forest Service employees to obtain their views about the Agency's mission and program direction.

KEY WORDS: 1990 RPA, National Forests, forest planning, National Forest policy, employee views.

Our job at the North Central Forest Experiment Station is discovering and creating new knowledge and technology in the field of natural resources and conveying this information to the people who can use it. As a new generation of forests emerges in our region, managers are confronted with two unique challenges: (1) Dealing with the great diversity in composition, quality, and ownership of the forests, and (2) Reconciling the conflicting demands of the people who use them. Helping the forest manager meet these challenges while protecting the environment is what research at North Central is all about.